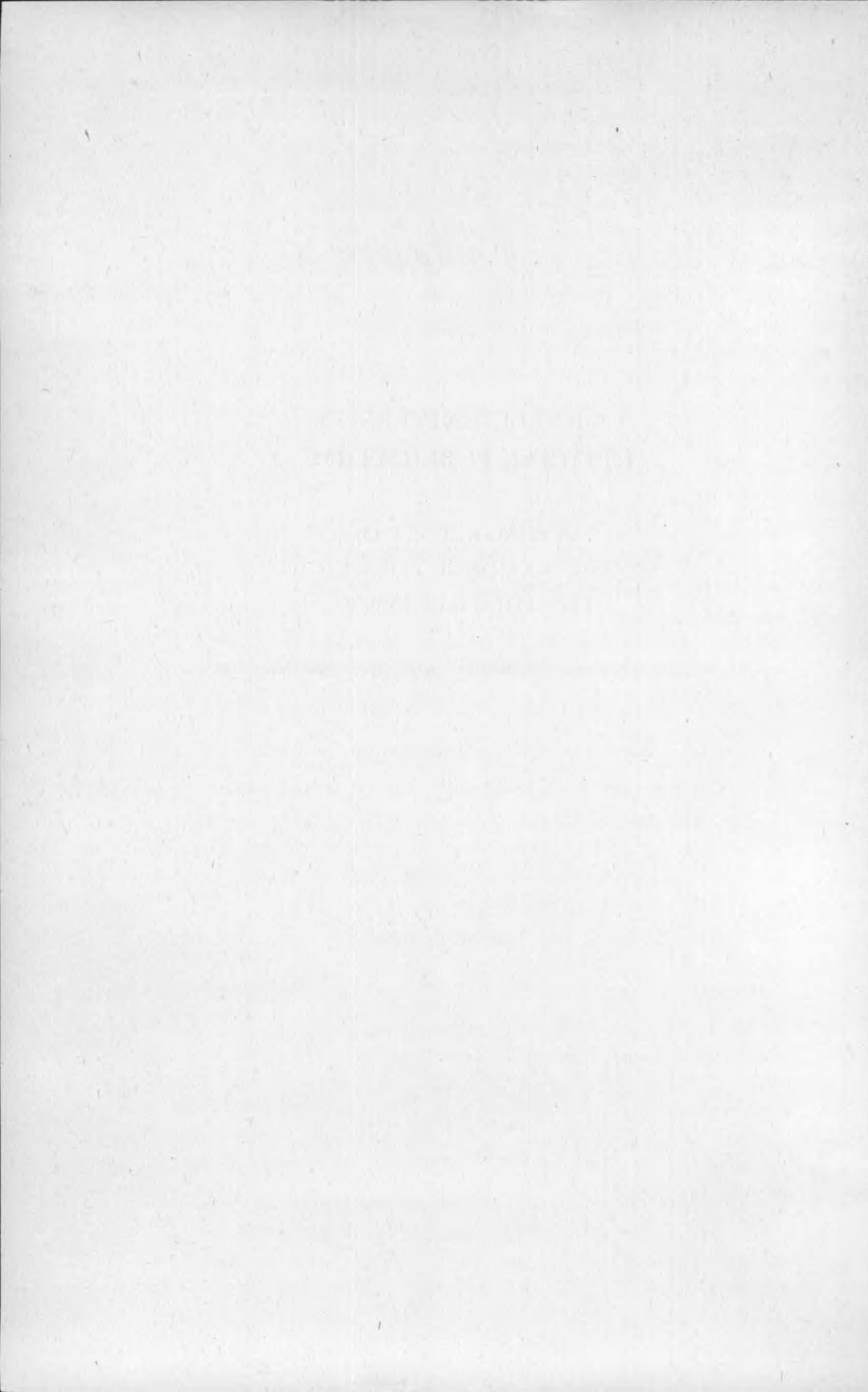


CORNELL UNIVERSITY  
OFFICIAL PUBLICATION

ANNUAL REPORT OF  
ACTING PRESIDENT T. P. WRIGHT  
FOR THE YEAR 1950-51

*With Appendices Containing Reports of the Deans and Other Officers*





# *Contents*

REPORT OF THE PRESIDENT.....	5
SUMMARY OF CHANGES IN THE BOARD OF TRUSTEES..	21
APPENDICES:	
I Report of the Vice President for University Development .....	27
II Report of the Vice President-Business.....	37
III Report of the Vice President for Research.....	40
IV Report of the Registrar.....	45
V Report of the Dean of the University Faculty.....	55
VI Report of the Dean of the Graduate School.....	59
VII Report of the Director of the University Library.....	65
VIII Report of the Dean of the College of Arts and Sciences	80
IX Report of the Dean of the College of Architecture.....	85
X Report of the Dean of the College of Engineering.....	89
XI Report of the Dean of the Law School.....	95
XII Report of the Dean of the Medical College.....	102
XIII Report of the Dean of the New York State Veterinary College .....	145
XIV Report of the New York State College of Agriculture and of the Cornell University Agricultural Experiment Station.....	151
XV Report of the Director of the New York State Agricultural Experiment Station at Geneva.....	158
XVI Report of the Dean of the New York State College of Home Economics.....	163

XVII	Report of the Dean of the New York State School of Industrial and Labor Relations . . . . .	171
XXVIII	Report of the Dean of the School of Business and Public Administration . . . . .	181
XIX	Report of the Director of the School of Education . . . . .	184
XX	Report of the Director of the School of Nutrition . . . . .	186
XXI	Report of the Director of the Summer Session . . . . .	191
XXII	Report of the Director of the Department of Military Science and Tactics . . . . .	193
XXIII	Report of the Director of the Department of Naval Science . . . . .	195
XXIV	Report of the Director of the Department of Air Science and Tactics . . . . .	200
XXV	Report of the Director of Physical Education and Athletics . . . . .	203
XXVI	Report of the Chairman of the Department of Clinical and Preventive Medicine . . . . .	204
XXVII	Report of the Director of Admissions . . . . .	211
XXVIII	Report of the Dean of Men and Dean of Women . . . . .	216
XXIX	Report of the Director of the University Placement Service . . . . .	224
XXX	Report of the Dean of the School of Nursing . . . . .	229
XXXI	Report of the Director of Veterans Education . . . . .	236
XXXII	Report of the Director of the Division of Extramural Courses . . . . .	238

# *Report of the President*

TO THE BOARD OF TRUSTEES OF CORNELL UNIVERSITY:

I HAVE THE HONOR to present the following report for the academic year 1950-51. Reports of the vice presidents, deans, directors, and heads of other administrative and academic divisions may be found in the Appendices. These descriptions of detailed operations are commended to your attention. Summaries of changes in the Faculty and board of trustees are also included. The financial report of the Treasurer will be submitted separately.

It is only fitting to begin this report on the state of the University by paying my respects to the great leader who departed during the year, Dr. Edmund Ezra Day. In preparing the talks which I occasionally have to make, I can gain no greater inspiration than that which comes from re-reading the many fine addresses that he gave both here and elsewhere in this country. Cornell owes a tremendous debt of gratitude to Dr. Day, a debt shared in great measure by education in America and by humanity. I am happy to report that the trustees have approved the naming of our Administration Building for Dr. Day. His name will be inscribed on the stone lintels over the doorways of the building, and a suitable plaque will be placed inside to commemorate his many substantial achievements.

I should underscore at the outset that the job of Cornell, as, of course, of any great university, is *teaching, research, and public service*. Inasmuch as I came to this campus in the position of Vice President for Research, it might be assumed that I would place research at the head of the list. But I would place that second and would come all out for the view that our big job is teaching and that research or any other of the activities in which we engage are justified only to the extent that they contribute and make more effective the job we do in teaching the youth that come to this institution. Cornell's position might be indicated by the word "microcosm," which means "a little world." That is what we have at Cornell, a world in miniature. Because of the very large range of subjects that are taught here, because of the many extracurricular activities that are available, and because of the diversity of the student body and Faculty population to be found on this campus, our students have a chance to gain a wealth of experience for later life that the subjects

they study in the classroom could not alone give them. They will leave here with knowledge and a preparation that will permit them to go on to wisdom.

Let me now turn to the matter of *enrollment*. During the past few years, we have had about 9,500 men and women students on the campus in Ithaca. We can, of course, expect that Selective Service will call some of our male students. We have made estimates of the probable results of draft actions, and I believe that we have kept our feet on the ground. I am very happy to say that we think we were a little pessimistic rather than the reverse, even though we were estimating the loss of considerably fewer students than was the case in some other universities which became quite unsettled by their forecasts. We have budgeted for 1951-52 on the basis of about 8,700 students, on the average, for the whole year. At present it looks as though we have very good prospects of two or three hundred more than that figure. You might ask, why do we feel our figures are not overly optimistic? Well, Cornell is tremendously fortunate. We have ROTC activities in all three branches of the military services, and in those together there are about 2,300 whom we might describe as "nonvulnerable" under the present Selective Service law. We have a few more than 2,050 women. We have 1,000 veterans. We will probably have next fall some 1,150 students who are under 18½ years old, who are married, or who are over 26. Altogether, we can count some 6,500 students at Cornell who are nonvulnerable to the draft. From the balance we assumed that we might lose as many as 25 per cent. We think now it will be somewhat less, but on that basis it brought us to the estimated 8,700. We believe that is a very realistic figure for our student population next year.

TABLE A. NUMBER OF STUDENTS ENROLLED BY COLLEGES AND SCHOOLS IN THE ACADEMIC YEARS 1940-41 TO 1950-51 INCLUSIVE

	Entire University Excluding Duplicates				Separate Colleges and Schools										Bus. & Pub.				Nurs- ing	Grad.
	Arts	Sci.	Eng.	Arch.	Agr.	Home Econ.	I & L R	Hotel	Vet.	Nutr.	Adm.	Law	Med.							
1940-41	7315	1881	1384	147	1568	492	...	326	160	...	...	191	295	...	967					
1941-42	7148	1894	1580	142	1458	512	...	319	157	...	...	162	314	...	722					
1942-43	6850*	1815	1689	118	1214	529	...	251	199	...	...	68	309	169	596					
1943-44	4320*	1355	821	67	460	649	...	70	41	...	...	49	42	320	612					
1944-45	4783*	1552	661	86	552	684	...	105	148	...	...	53	68	364	625					
1945-46	7928*	2075	1556	162	1127	640	173	287	154	...	...	229	327	270	1050					
1946-47	10560	2522	2667	208	1660	640	277	417	133	20	41	355	322	233	1217					
1947-48	10830	2551	2648	229	1619	632	316	414	145	42	94	378	315	213	1391					
1948-49	10673	2482	2367	220	1725	619	345	430	189	54	120	377	319	122	1505					
1949-50	10689	2573	2068	223	1765	638	347	425	197	47	121	411	346	152	1594					
1950-51	10661	2734	1759	235	1734	631	331	423	194	48	110	461	335	180	1654					

\* Civilian students only are included in the figures for these four years.

TABLE B. NUMBER OF DEGREES GRANTED BY COLLEGES AND SCHOOLS IN THE ACADEMIC YEARS 1940-41 TO 1950-51 INCLUSIVE

	Entire Un- versity	Arts & Sci.	Separate Colleges and Schools										Bus. & Pub. Adm.	Law	Nurs-	
			Eng.	Arch.	Agr.	Home Econ.	I & L R	Hotel	Vet.	Nutr.					Med.	ing Grad.
1940-41	1647	411	185	15	287	121	...	71	38	...	...	52	63	...	404	
1941-42	1439	349	217	17	240	104	...	48	43	...	...	59	75	...	287	
1942-43	1384	360	204	18	201	107	...	53	37	...	...	28	75	10	291	
1943-44	1213	287	287	12	86	129	...	9	79	...	...	17	75	19	213	
1944-45	1250	293	246	14	69	198	...	14	32	...	...	9	156	19	200	
1945-46	1288	303	217	12	116	160	...	17	67	...	...	20	80	16	280	
1946-47	1931	544	355	23	221	108	11	78	35	1	...	51	83	54	367	
1947-48	2595	639	507	33	246	170	81	89	1	11	33	106	78	74	527	
1948-49	2798	612	567	44	325	145	81	109	41	28	50	148	68	36	544	
1949-50	2764	611	480	45	414	149	87	95	51	13	51	99	78	27	564	
1950-51	2485	555	185	55	347	137	85	109	47	14	40	129	87	38	657	

It might also be mentioned that we are adding about 125 *women students* this fall; in the course of four years this will mean about 350 more women students than we have had. The women will then account for some 24 per cent of our enrollment. We are taking care of the housing of the additional women by reopening Cascadilla Hall to women next year. We are also spending a large sum of money, \$365,000, to rehabilitate Sage College with the intention of opening it to women in 1952-53. I am convinced that our accommodations for women are the equal of those of any university in the country. By the addition of Sage and Cascadilla for this purpose, we intend to maintain that high standard.

One hears comments of instability among our *student body*. Of course, everyone knows that the times are trying and of a type that brings concern to young men of military age. It is extremely gratifying that, despite the acceleration of activities in the military fields and the stirrings of world unrest, the stability of our students has continued as high as it has. I do not find any particular cause for concern in this quarter. Morale is high, and in general student conduct is good. Occasionally students may go a little off the deep end, as has been reported they did during a recent weekend. When we received reports at that time that everything was not as it should have been, we brought the students into our discussions and reminded them that one of the traditions of Cornell is to treat its students as adults and that with the freedom we give them goes an accompanying responsibility. We stressed that only they themselves can solve this kind of problem. They were appreciative of being thus consulted and are going back to the Student Council to attempt to find a solution. This is an example of the way in which we are seeking to meet problems through cooperative efforts and use of the general procedure of persuasion rather than compulsion, a policy of which Dr. Day so frequently spoke. That we can with this philosophy meet whatever situation may develop, I am confident.

We have been conducting regular meetings of leaders of the student body, members of the Faculty, and representatives of the administration to discuss problems of mutual interest. I think this has been very fruitful and certainly hope that such interested student participation will continue. In forming the Long-Range Planning Committee for the University several months ago, I decided to include the president of the Student Council so that students could give us their ideas on the outstanding needs of Cornell on the long-term basis.

In another area, athletics, we are at the top. Through several years we have had a whole series of football victories. We have had two outstanding basketball teams. Our track team is one of the best that Cornell has ever had. Our baseball and tennis teams have done well for several years.

Another student group in which we may take pride is the Glee Club. An activity particularly interesting to me is the Pilots' Club, with which occasionally I have had a chance on Sunday mornings to fly over the hills in the Finger Lakes district. I think too that the *Cornell Daily Sun* is an outstanding student paper, and, mind you, it is completely a student paper. And the Women's Self-Government Association is one of my particular enthusiasms. In essence, I feel that through all such activities our students are given a chance to assume types of responsibility that fit them for citizenship as well as for the careers for which our formal education is specifically fitting them.

Let us pass from students to the *Faculty* and note what progress in improvement of relations has been accomplished in that area. Budget-wise, we have now brought all of our Faculty to the salary minima which were established several years ago. Generally speaking, the average salaries are about five or six hundred dollars more than the minima with an exception in the case of full professors, where they are about sixteen hundred dollars more. In the endowed colleges the actual average salary for instructors is \$3,566, for assistant professors, \$4,528, for associate professors, \$5,594, and for full professors, \$7,631. These salaries, considerably less than for corresponding grades in the state-supported colleges, are about the same as for an average of eighteen universities and colleges in this part of the country, but they are still well below those at Harvard and Yale, and far less than they should be. Therefore, in raising funds we must continue to include as a primary objective the increasing of Faculty salaries. The Faculty is the heart of the University and must be kept strong.

Cooperation between the Faculty and the administration has been



something that to me has seemed most important; how to achieve it has been given much careful consideration. I have been privileged to participate in meetings of the Faculty Committee on University Policy and have been able to work with that group in drafting legislation which in every case has later received the approval of the Faculty as a whole.

This brings us to the matter of intercommunications, which is always a difficult one in a university. We have attempted to spread out on the table all controversial matters and thresh them out to a point of understanding from all points of view. If this can be done, it is very seldom that problems cannot be solved. Everything that contributes toward better communications between trustees, administration, Faculty, and students is all to the good. In this respect, I think we can say that we have reached a high level of achievement.

I should mention several other matters affecting the Faculty. One is establishment of a due-process procedure for hearing, review, and decision in affairs involving Faculty members, including cases that might warrant dismissal. That process has been lacking heretofore. Now we have a very well planned procedure. Not that it will ever be used—I hope that it never will be—but it is there, and everyone is assured of a fair hearing in case the contingency should arise. This leads into the matter of loyalty and communism. Dr. Day talked to you about this three years ago and indicated his own conclusion as to appropriate policy—which I still believe is a proper one. That policy is that in times of national emergency such as ours, there should be no place on the Faculty for an *avowed* or a *proved* Communist. I emphasize those words because it is necessary to remember that we find ourselves in a time when accusations are frequent and guilt by association is often assumed to be final guilt. I think there is nothing we must guard against more than bowing to that. Due process must be maintained.

I do not feel (and I discussed the following matter with Dr. Day before his death), that members of our Faculty, certain of whom have received unfavorable publicity, are Communists. One member, for example, is advocating world peace by a course of action in which he has a deep conviction and which happens to parallel the present line of the Communist Party. But I do not think he is a Communist. He is an ardent pacifist. He believes that there is nothing in the world today that is more important than preventing a third world war. He is simply following a course which he conceives will be effective in assuring the attainment of world peace. Many, including myself, think that he has been wrong in associating himself with an organization that permits

admission of Communists and in placing himself on the same public platform with them. I do not think, however, that that in itself is sufficient evidence that he is a Communist. Surely we all long for a peaceful world. I therefore feel that we should follow the procedure that Dr. Day advocated so strongly, of trying to change this professor's ways by persuasion, and such an effort has been made.

Another thing that is of great importance to the welfare of the Faculty is the new Statler Hall and particularly the Faculty Club wing. I don't think I could overstress the importance of having a Faculty Club, and such a magnificent one, in which we can meet and discuss things of current interest.

Another development that we are getting under way is an improvement in our Faculty advisory service to students. It seems to me that this has been neglected, in part because advising in general is a chore the Faculty does not like. An investigation was made by a subcommittee of the Deans' Conference, which came to the conclusion that one reason that advisory service was not looked upon with favor was the fact that Faculty members felt that performance of a good job in that area would not necessarily work to their credit in achieving promotion and increase of salary. We have changed this, making it a matter of policy that advising students is on a level with teaching and writing and research as a consideration in attaining promotion or salary adjustment. This is extremely important because, after all, these young people who come to us straight from high school need mature advice almost more than anything else. Now and then, we find students getting off on the wrong foot at the outset and registering in something for which they are not properly fitted. If they do not have advice as to how they can change their courses of study or other activities, they will flounder, and many of them will "bust" simply because they are in the wrong niches.

Two fine professorships have been established this year. One is a professorship in the general field of American civilization, which Mrs. John L. Senior has created by a suitable endowment. This will be a *university* professorship, the first one we have had. It will be all-University, campus-wide in scope, not attached specifically to any one college. The other is a professorship in the School of Nutrition, established with funds raised as a memorial to Ed Babcock, whom many of you knew and loved and appreciated for his tremendous contributions to this University. Professor Herrell F. DeGraff has been appointed as the first Babcock Professor in Food Economics in the School of Nutrition.

I would be remiss if I did not refer briefly to *research* at Cornell, which



has become a very important part of our activities. If you could see some of the exciting projects we have on this campus, you would know what I mean when I say that you can't really assess our research effort in dollars and cents. By that standard, however, such as it is, the sponsored research work in Cornell University has a value of \$11,500,000. That is made up of \$2,000,000 for the endowed colleges, about \$4,000,000 in the state-supported colleges, and about \$1,250,000 in the Medical College, and about \$4,500,000 in the Cornell Aeronautical Laboratory. The work at the Aeronautical Laboratory is increasing in volume of business and will probably reach a figure of \$5,500,000 next year and a little more than that the following year.

The Cornell Aeronautical Laboratory is really a large institution; it now has almost 700 employees. That number will probably go up to 750 or 800 within the year. We are making a very determined effort to coordinate the activities at the laboratory in Buffalo with our work here, so that professors on this campus, particularly in engineering and in the physical sciences, may work part-time when on vacation, on leave, or in the summer as consultants at the laboratory. This serves several purposes. First of these is to assist our government in its military development program, as almost everything at our Buffalo Laboratory is concerned with development in the military field. In so doing, Faculty members, in addition to augmenting their salaries, may find an outlet for their patriotic desires to contribute to the military effort so essential in times such as these. We have a real opportunity to bring this laboratory into close coordination with the University and so serve very worthwhile purposes in public service and in service to Cornell.

Of the eleven and one-half million dollars' worth of Cornell research projects, government agencies sponsor about 79 per cent. That leaves 21 per cent to come from other sources: 10 per cent of this is from corporations, a little over 1 per cent from trade associations, about 2 per cent from individuals, 6 per cent from foundations, and 1.6 per cent from Cornell budgets. In those figures is an indication of the pitifully small research effort that we could conduct were it necessary for us to depend on the amount of money that we could contribute from our own budget. We have found government sponsorship is most acceptable and is not onerous to administer, and this is all to the good since it enables Cornell to contribute far more to the public service than would be possible otherwise.

Possibly some of you saw an article by Alfred Sloan in a recent issue of the *Saturday Evening Post*, in which he made a plea for greater sup-

port of universities by corporations. That is a sound plea and one that we have been exploring for some time. With the present personal-income-tax structure and the existent distribution of wealth in the country, unless corporations come to appreciate the responsibility they have to universities, which, after all, furnish them much of their raw material—in other words, science and people—we will then have to depend even more on government. This could lead to the final elimination of the privately endowed type of institution, competitive with government institutions; such a result would be deplorable, as I feel it is absolutely essential to the nation's welfare to maintain a proper balance between the two types.

About 85 per cent of the research on the campus here in Ithaca is in the area of fundamental studies. This contemplates the seeking of basic truth in the physical sciences, social sciences, and humanities and all other fields of activities, simply to ascertain the fundamental facts on which, later, applied research can be brought to bear in developing the practical gadgets that are of benefit to mankind. The place of the university in the research field should, as it is here, be predominantly in fundamental studies.

Talking in terms of dollars again, we make a real contribution to the University budget from our sponsored research, because we receive reimbursement for the Faculty salary in proportion to the work that a Faculty member performs on one of these projects, and, in addition, a 50 per cent overhead on salaries. In 1946, the amount of this contribution—which means unrestricted funds to the University—was about \$140,000. That has risen until in 1951-52 we are budgeting \$419,000 as income from this source. You can readily see that it is extremely important from the financial standpoint to have available the unrestricted money which derives from our research efforts.

In developing our research programs, we have created certain *centers of activity* cutting across department and school and college lines. Where we can find a common denominator that has impacts of importance in several disciplines, we form a center. In the social sciences, dealing with man's relations to society, for example, we have outstanding staffs in sociology and anthropology, economics, business and public administration, psychology, and other areas where social science research is carried on. Because of the excellent work that had been done in that area and the type of staff which we have available, we were successful in obtaining a grant from the Ford Foundation of \$300,000 for sponsorship of work in the social sciences.

We have another group that has developed the art of interpretation

of aerial photography to a remarkable degree and so established a center which cannot be equaled anywhere in the world. This work has implications in geology, in several branches of engineering, in aviation, and in other areas. As a matter of fact, the professor who heads this work was called to Korea not long ago to assist the military forces in meeting problems of aerial photographic analysis. This group is called the Cornell Center for Integrated Aerial Photographic Studies. We have another common denominator in housing. This encompasses the fields of architecture, home economics, social relationships, mechanical engineering, heating and ventilating, landscaping, and others—all bearing on the question of housing. We formed the Cornell Housing Research Center last year. Already this group has received three large research contracts, which is a start toward the end that when one thinks of housing research he automatically thinks of Cornell, just as now, when people think of research in the social sciences, they think of Cornell, and when they think of nutrition, they think of Cornell. We were also successful in getting a grant from the Daniel and Florence Guggenheim Foundation to establish an aviation safety center. This is located in New York, is operated by Cornell, and is being widely recognized for work in its field.

Now a word on *physical plant*. You are aware of course of the establishment of the laboratory for the study of virus diseases of dogs. That received considerable publicity last year and is a very fine addition. Henceforth Cornell will very likely be considered as having the outstanding center in that area. The laboratory building was completed, staff is at work in it, and we are accumulating funds for endowing the operation of the laboratory. At the end of the upper campus the new Albert R. Mann Library is nearing completion. It will be opened sometime next winter to house the library facilities of the Colleges of Agriculture and Home Economics. Good progress is now being made on Anabel Taylor Hall.

On the southern end of the campus, the materials and metals processing buildings of the College of Engineering will be erected. Work on excavations is well along; and I would like to mention one or two things about this project. We have not had any new facilities in engineering for some time. We have been able to stay at the very top in engineering in this country only by virtue of the excellence of our staff and our fine reputation of long standing. But we have felt that, unless we could make a start toward getting new facilities, the time was bound to come when, because of competition with other institutions that have magnificent new buildings and fine new pieces of engineering equipment, we might be

forced to take a second-place position. Therefore, the trustees very wisely have decided to go ahead with these new buildings, advancing funds from other sources until we could raise by gifts the balance of the money beyond that already contributed. I think that the materials building, serving all the fields of engineering, will give a new lease on life to our College of Engineering and enable it to continue to attract the caliber and number of students we want to have. That desired number is about 2,250, including both graduate and undergraduate students. By happy thought, the two materials building units will be named for two of Cornell's greatest engineering figures, Dean Dexter S. Kimball and the late Director Robert H. Thurston.

I have already mentioned the rehabilitation of *Sage College*. The plan which had called for that building to be torn down has been abandoned, and the electrical engineering building, which had been scheduled for that site, will go to another location just as suitable (on the east side of East Avenue). I think that this is a very happy solution. The project known as Moakley House is going to take a somewhat different form from the original conception. A building will be erected at the golf course to serve students and Faculty as a sort of recreation center. An additional nine holes will be added to the golf course. There will be a ski run, tennis courts, and similar facilities so that we will have a much needed recreational center for students in that area of the campus. Meanwhile, plans are being drawn for the sports building provided by the munificence of the Teagles, and it undoubtedly will not be long before work will start on that much-needed gymnasium facility.

I would like to mention two more items of importance to Cornellians. First is the discovery of the Andrew D. White *diaries*, which are now being typed so as to be available for the careful study they merit. Certainly, these are an important addition to the University's treasures; second—and in the same general connection—we have established an archives department in the library where we can collect all the important historical material bearing on Cornell. An archivist and an assistant will work to get this material in shape to aid in the preparation of a history of Cornell which should be available for the celebration of the centenary in 1965.

The next matter I will discuss concerns *organization*. We are all extremely fortunate that the selection committee has picked a man of such outstanding qualifications for president of this University as Mr. Deane W. Malott—surely an ideal choice. He has had experience in business. He has been involved in many government activities. He has had ex-

perience in the administration of a great university. He is widely known and universally liked. We can look forward to a long and successful administration in his able hands.

Regarding the *staff* in general, I can assure you that the University was never better manned than it is right now. This applies both to the Faculty and the administration. In the areas of finance, business, law, academic liaison, and University development, we have top men of outstanding ability. I will mention only one individually—Willard Emerson. It was a most happy occurrence that he was chosen to head our University Development office. I have mentioned him particularly because he came into the job at the same time I came into the acting presidency. I have dealt with him a great deal, and I can assure you he is exactly the right man for the job.

During the past few months, we have made a going concern of what we call the president's cabinet. Possibly that is too formal a name. What it really means is that the administrative officers whose positions I have listed get together regularly to discuss the problems that any of us wish to bring up in any phase of the University's affairs. In that group is the Dean of the University Faculty, so the Faculty interests are covered in administrative considerations. I think the establishment of this working cabinet has been a very fine thing. It has brought us closer and has assured that when recommendations reach the board of trustees, they have been thoroughly debated and fully explored first by the administration.

The trustees, in my opinion, are a policy-making group. For a number of reasons, there have been some areas in which the trustees have had to get into the administrative matters to a degree that may not be appropriate. The trustees have authorized the study of that whole area of liaison between themselves and their committees and the administration and administrative groups. Within the next year, we should have a better-defined organization worked out. What I have just referred to is essentially a business structure. We have a board of directors and an administration. But a university is really a different sort of thing from an industry or business, for in it we have in addition a faculty and a student body. The faculty historically is—and rightfully so—the center of the university. But universities have gotten so large that it is necessary to have administrative groups if for nothing else than to relieve the faculty of paper shuffling, and this is unfortunately the task of all administrators, I can assure you. In any event, we must create means for achieving a proper line of communication between the administrative



body and the Faculty. This we have done by the means of which I have spoken—greater participation in the Faculty Committee on University Policy and in the University Faculty meetings themselves. But also there are a number of subsidiary Faculty committees that deal with a wide range of subjects. These are all very active now, perhaps more so than before, and some new ones have been established.

First, we have a new committee on housing standards. We have found—and this suggestion originated with the students and not with us—that some of the housing standards in off-campus residences were deplorably bad. Something had to be done about it. Certainly, we can insist that all precautions called for by law, such as fire protection, are available. We can go beyond that, and, pending the time when we can get more men's dormitories, we can at least make sure that the living quarters of our men students off-campus are improved. We have established another committee to study the whole field of visual aids, a means of instruction that is becoming extremely important. This includes radio, motion pictures, possibly television, and other types of visual and sensory aids that can be of assistance in instruction.

We have formed two other committees of great importance. One is called the Optimum Size of the University Committee. Cornell has grown from a student body of around 5,000 to one of almost 10,000 in a fairly short period of time. The numbers have outgrown the facilities in many respects, but, with the pressures ahead of us and with the inflation that we now face, it is very difficult to see how we can get along financially with a student body of much less than at present. I don't need to emphasize that income from tuition and fees, although only about half of the total, is an important part of our budget. Recognizing on the one hand the possibility that a somewhat smaller student body would be better from the standpoint of our facilities, and on the other the fact that we have to have tuition income to achieve balanced budgets, we are studying all educational areas of the University to see if it is possible that there may be some courses here and there with only two or three students that could be somehow adjusted to lessen the Faculty load and still not depart too far from Ezra Cornell's desire that we should teach every study to everyone who wants it. The committee on the size of the University is composed of representatives of the Faculty and the administration. It is studying the whole problem of educational policy as a base but is relating it to finances throughout.

The other committee to which I just referred is the Long-Range Planning Committee. It has frequently been the case that objectives that

we had selected as the most important were not the ones which someone wished to sponsor, or vice versa. It therefore seemed most important to have before us at all times a chart that would reflect all of the University's needs in all of its areas and in priority of need. The committee will work to develop this chart of needs to include items in all of the colleges, in the administration, in student activities, and such other all-University objectives as men's dormitories and library facilities. The committee is one that will continue in existence indefinitely to keep this chart up to date so that fund-raising activities can be directed to the projects which really represent the University's first needs. I have great hopes that this will regularize our whole process of fund raising, including objectives and expansion, all aimed at advancing Cornell in a carefully planned and orderly fashion.

One final matter on the general subject of organization—the establishment of appropriate relations between our contract colleges here and the recently created New York State University. We are working on this. We have had very fine relations with President Eurich and look forward to continuing them with his successor. One thing we hope to develop is a full recognition in Albany of the unique position that Cornell has in the State University structure as compared to other institutions which are administered directly by the state rather than by another university under contract as they are here at Cornell.

A word or two on *finance*. First of all, as you know, our budget for 1950-51 was balanced. I am very happy to say that we had on June 30 a surplus of over \$150,000. This was made possible by four circumstances.

First was a most fortunate increase in income, which we had no way of foreseeing at the time the budget was made. Second, savings were effected through lapses of salaries and general expenses. Third, we found it appropriate to make certain transfers of funds from the Development Office. Fourth, we benefited to a great extent from savings incident to improved efficiency of operations.

It is notable, too, that, beginning July 1, we no longer had an accumulated deficit made up of capital expenditures of the past. This improved position was made possible in large part by applying against that debt one of the objectives of the Greater Cornell Fund drive—the sum of \$750,000 raised for the purpose. The deficit, of course, also had assigned to it the surplus from this year's operations described above. Another factor was the approximately \$100,000 net in unrestricted gifts made to the Alumni Fund during the last half of this fiscal year. As a matter of fact, after wiping out that deficit of \$925,000, we are starting 1951-52

with some \$75,000 of surplus to help offset such deficit as we may develop from a decrease of male students and resulting loss in tuition.

The Greater Cornell Fund drive needs little mention here as you have been completely briefed on the fine results of that effort. As you know, the goal of \$12,500,000 was exceeded. The unrestricted funds which will finally be available after restricted funds are taken out of the total and after the assignment of the \$750,000 to the elimination of the accumulated deficit mentioned before, will be distributed among the unachieved objectives on the basis of an equitable formula which has met with the approval of the trustees, administration, and Faculty. A very happy solution to a knotty problem was thus achieved.

As for a balance in our budget for 1951-52, this is in the lap of the gods, because it is so dependent on student enrollment. If we were to have the same student body this fall that we had last September, we would about break even in our budget next year. As we fall down from that figure, however—and we certainly shall some—there will be just that much red ink. However, several potential sources of income in addition to the initial surplus of \$75,000 lead me to believe that the deficit, if any, next year will be small and nothing to cause particular concern. This is particularly noteworthy in view of the fact that quite a few important objectives have been achieved in budgeting expense. For instance, we now have full social security coverage, with the University participating in the appropriate share, for all eligible people on the campus. We have achieved all of the minimum Faculty salaries. We have made very substantial salary increases on the basis of merit, for our Faculty and other staff. This was accomplished on the basis of a formula which determined that if a particular school or college or office was able to reduce its expense from the previous year by 5 per cent, all of that saving plus 2 per cent more—a total of 7 per cent—would go exclusively into salary increases. This has been accomplished throughout. We have improved the retirement situation. We have included twice as much money for deferred maintenance as we have had available during the last several years. We have been able, by salary increases here and there, to retain our staff, to a large extent. We have been able to balance salaries between different categories of employees as well as within categories to a considerable extent, and we have added a substantial amount for the purchase of books in the library.

All of these things, and the knowledge of them, have contributed substantially to what I believe is a very high state of morale on this campus—but let us not think we do not still have needs. We have plenty of them. Our Long-Range Planning Committee will bring these out, and



I feel confident that those who are in a position to contribute will help us to meet many of them. Endowment for operating expense, of course, is a need that we always have. We will probably never be able finally to catch up with inflation and attain an endowment equal to our very real need. Actually, Cornell University at its present size should have about \$25,000,000 more endowment than it has now. We have a desperate need for new plant, and, without meaning to anticipate our planning committee's findings, I do believe that near the top will be library expansion and men's dormitories as our two greatest physical needs on the campus.

We have a need for further salary increases. I gave you the average salaries of our Faculty. Many of you are in business and can compare these mentally with the salaries that even minor executives get in your organizations. You can see that they are pitifully small. Certainly, at the top of our needs is money for the further increase of Faculty salaries. We have need for the establishment of many professorships, because every chair that is sponsored not only gives honor to the founder and makes permanent a very important professorship, but also relieves the academic budget to the extent of the salary of that professor. That is a very fine way of contributing to the University. We also have desperate need for more fellowships and scholarships. The time must never arrive when education in our universities is available only to those having means to pay the full costs. There must be fellowships and scholarships endowed to assist students who are unfortunate in their financial status but have the abilities to proceed further in their education. All these fund-raising activities are in able hands. I am sure that those who are expected to give will give generously. It is a great responsibility, this supporting of Cornell, and one which must fall, as far as unrestricted giving is concerned, very largely on the alumni and alumnae of the University.

In conclusion, I hardly need to allude to the troublous times in which we find ourselves—times of great tension. They are certainly that from the standpoint of the world situation, but possibly attention should be called especially to effects on Cornell. For us, the crisis is inflation. Inflation is a condition that hits universities harder than other organizations. On the one hand, we have a fixed income. On the other, we have our coal bill, our light bill, and our labor costs going up directly as the cost of living increases through inflation. Some twenty years ago my father, an economist, made a survey of the effects of inflation in Germany after the First World War. As you may know, inflation became catastrophic; it increased to a point where the mark had to have ten or fifteen

zeros added to achieve equivalent prewar buying power. Universities and life insurance companies were the first to fail. That analogy isn't exactly applicable to us perhaps, but the point is that inflation is a real and terrible danger to institutions such as Cornell.

Another important concern is the imperative need to hold our staff. We are striving toward that objective, not only by salary increases, not only by creating opportunity to satisfy patriotic feelings by work on military devices in our Buffalo Aeronautical Laboratory and elsewhere on a consulting basis, but also by trying to raise the whole morale of the Faculty so that its members will want to stay here. That objective is being quite largely achieved. I can cite many instances in which a professor receiving \$6,000 was offered \$7,500 or \$8,000 or more elsewhere. Usually, with a \$500 raise or something of that kind, augmented by his love of Cornell and his resultant desire to stay here, he has remained. Unfortunately, that cannot be the case among the junior staff people. When assistant professors in the \$4,000 or \$5,000 bracket receive offers of \$7,000, \$8,000, or \$9,000 from corporations, as not infrequently occurs, we simply have to wish them well and bid them good-bye. You can't meet that sort of competition. In holding our associate professors and full professors, I am glad to say, we are in general doing very well indeed.

Another strength that we have and must keep is the liberal heritage of Cornell, this nonsectarian, coeducational institution with its equality of subjects, its freedom with responsibility, and all of the other characteristics that were so important in the minds of its founders, Andrew Dickson White and Ezra Cornell. This heritage must be constantly guarded and cherished. In times such as these in which we are living there is always danger of encroachments. We must remain the great liberal university that we have always been.

To end on a personal note, I can describe my time as acting president as a privileged one. During twenty-two years as an engineer and as an administrator in business and eight years in government work, I had always had as an ideal a desire finally to wind up in a university. This has been richly attained in the experiences which I have had here at Cornell.

I can assure you that the University is in good condition. With the excellent president who is to carry on, you can look forward confidently to a vigorous, effective, and worthy Cornell, both in the immediate and in the long-range future.

T. P. WRIGHT

*Acting President of the University*

## SUMMARY OF CHANGES IN THE BOARD OF TRUSTEES

### *To the President of the University:*

SIR: I have the honor to report the following changes which occurred in the membership of the Board of Trustees, its committees, and its representation on administrative boards and advisory councils during the academic year 1950-51:

#### BOARD MEMBERSHIP

Dr. Cornelis W. de Kiewiet's resignation as acting president of the University on January 27, 1951, made in order for him to accept the presidency of the University of Rochester, was regretfully accepted by the Board of Trustees, and Vice President for Research Theodore P. Wright was elected acting president of the University, effective January 27 to June 30, 1951. As acting president, Dr. Wright succeeded Dr. de Kiewiet as an ex officio member of the Board.

Deane Waldo Malott was elected president of the University, effective July 1, 1951, thereby succeeding Theodore P. Wright as an ex officio member of the Board of Trustees.

The death of Howard E. Babcock on July 12, 1950, was reported with sorrow. Mr. Babcock was a member of the Board of Trustees from February, 1930, until his death. He served as a representative of the New York State Grange from 1930 to October, 1941, and as a member elected by the Board from 1941 until his death. He was chairman of the Board from October, 1941, to June, 1947.

The death of Franklin W. Olin on May 21, 1951, was reported with sorrow. He was a member of the Board from February, 1934, until his death.

Joe R. Hanley was succeeded by Frank C. Moore as lieutenant governor of New York State on January 1, 1951, and, by virtue of this position, Mr. Moore replaced Mr. Hanley as an ex officio member of the Board of Trustees.

The Board elected Thomas W. Pew as a trustee to complete the five-year term of Howard E. Babcock, which expires June 30, 1955.

Trustees Mary H. Donlon, Nicholas H. Noyes, and Robert E. Tremen were re-elected by the Board for five-year terms, beginning July 1, 1951.

The Cornell Alumni Association elected Dorothy M. Arnold and

Reese H. Taylor to succeed Victor Butterfield and Edward E. Goodwillie as trustees, both for five-year terms beginning July 1, 1951.

Trustees Frank S. Columbus, Louis Hollander, and Thomas A. Murray were re-elected members of the Board from the field of New York State labor, for one-year terms beginning July 1, 1951.

Harold M. Stanley was re-elected a member of the Board of Trustees for a one-year term beginning July 1, 1951, by the executive committee of the New York State Grange.

The University Faculty elected John W. MacDonald as faculty representative on the Board of Trustees for a five-year term, beginning January 1, 1951, to succeed Frederick G. Marcham.

The Faculty of the Medical College re-elected Joseph C. Hinsey as faculty representative on the Board of Trustees for a three-year term, beginning January 1, 1951.

#### TRUSTEE EMERITUS

The death of Roger H. Williams, Trustee Emeritus, on October 26, 1950, was reported with sorrow. Mr. Williams served as trustee for twenty-eight years and as trustee emeritus from June, 1948, until his death.

#### STANDING COMMITTEES

The trustees elected to the respective standing committees served for the entire academic year 1950-51, with the following exceptions:

*Executive Committee:* Howard E. Babcock, an elective member, died July 12, 1950. On October 21, 1950, J. Carlton Ward, Jr., was elected to fill the unexpired term until June 30, 1951.

*Planning and Development Committee:* The vacancy in this committee caused by the death of Howard E. Babcock on July 12, 1950, existed for the remainder of the unexpired term.

*Law Committee:* On October 21, 1950, the By-laws of the University were amended to provide seven members on the Law Committee instead of five. William D. P. Carey and Francis H. Scheetz were elected members of the Law Committee on October 21, 1950, for a term expiring June 30, 1951.

On June 11, 1951, the Board reconstituted the membership of its standing committees for the year beginning July 1, 1951, as follows (re-election indicated by \*):

The chairman of the Board and the president of the University are ex officio members of all committees.

*Executive Committee:* Chairman, Arthur H. Dean\*; Vice Chairman, Mary H. Donlon\*; Larry E. Gubb\*, Harold M. Stanley\*, Harry G. Stutz\*, Maxwell M. Upson\*, J. Carlton Ward, Jr.\*; and the following ex officio members: chairmen of the other standing committees: Joseph P. Ripley\*, John S. Parke\*, Francis H. Scheetz, George R. Pfann\*.

*Investment Committee:* Chairman, Joseph P. Ripley\*; Vice Chairman, Horace C. Flanigan\*; Matthew Carey\*, John L. Collyer\*, Arthur H. Dean\*, Nicholas H. Noyes\*, Myron C. Taylor, Walter C. Teagle\*, Maxwell M. Upson\*.

*Buildings and Grounds Committee:* Chairman, John S. Parke\*; Vice Chairman, Walker L. Cisler\*; Frank S. Columbus\*; Ruth F. Irish\*, George R. Pfann\*, J. Carlton Ward, Jr.\*. One vacancy exists in this committee.

*Planning and Development Committee:* Chairman, Francis H. Scheetz\*; Vice Chairman, J. Carlton Ward, Jr.\*; Larry E. Gubb\*, Thomas W. Pew, Albert K. Mitchell\*, Robert E. Treman\*, Preston A. Wade.

*Law Committee:* Chairman, George R. Pfann\*; Vice Chairman, Mary H. Donlon\*; W. D. P. Carey\*, Jacob G. Schurman, Jr., Elbert P. Tuttle\*.

#### SPECIAL COMMITTEES

Changes were made in the following special committees of the Board:

*Audit Committee:* The Audit Committee was reconstituted by the Board on January 27, 1951, effective for the period until January, 1952, to include Trustees Jacob G. Schurman, Jr., to succeed J. Carlton Ward, Jr., as chairman; Walker L. Cisler to succeed Victor Butterfield; and Thomas W. Pew to succeed Jacob G. Schurman, Jr., as a member of the committee.

*Board Membership Committee:* On June 11, 1951, J. Carlton Ward, Jr., was elected chairman and Horace C. Flanigan was elected vice chairman, for one year, beginning July 1, 1951. A new member elected to the committee was Robert E. Treman, whose term extends



from July 1, 1951, to June 30, 1956. The other members of this committee are William D. P. Carey, whose term expires June 30, 1955, and Herbert F. Johnson, whose term expires June 30, 1954.

#### CORNELL UNIVERSITY COUNCIL

On October 21, 1950, the terms of all members of the Administrative Group of the Greater Cornell Committee and members-at-large of the Greater Cornell Committee ended with the termination of the Greater Cornell Committee. Robert E. Treman and Victor Emanuel were trustee members of the Administrative Group, and all members of the Board were members-at-large of the Greater Cornell Committee.

On October 21, 1950, the Cornell University Council was established. Ruth F. Irish and Francis H. Scheetz were elected trustee members on the administrative board of the Cornell University Council for terms expiring June 30, 1951. The following were elected members-at-large of the Cornell University Council, for the terms indicated:

(a) Three-year terms, expiring June 30, 1953: Neal Dow Becker, Victor Butterfield, Matthew Carey, Walker L. Cisler, John L. Collyer, Arthur H. Dean, Victor Emanuel, Larry E. Gubb, Herbert F. Johnson, Nicholas H. Noyes, Francis H. Scheetz, Walter C. Teagle, Robert E. Treman, Maxwell M. Upson, J. Carlton Ward, Jr.

(b) Two-year terms, expiring June 30, 1952: William D. P. Carey, Mary H. Donlon, Horace C. Flanagan, Edward E. Goodwillie, Ruth F. Irish, Albert K. Mitchell, Thomas W. Pew, Elbert P. Tuttle.

(c) One-year terms, expiring June 30, 1951: C. W. de Kiewiet, Preston A. Wade.

On June 11, 1951, Ruth F. Irish and Larry E. Gubb were appointed Trustee members of the administrative board of the Cornell University Council for a one-year term, effective July 1, 1951, and Walker L. Cisler, Arthur H. Dean, Mary H. Donlon, and Preston A. Wade were appointed members-at-large of the Council for three-year terms, effective July 1, 1951.

#### ADMINISTRATIVE BOARDS

*Joint Administrative Board of the New York Hospital-Cornell Medical Center:* Cornelis W. de Kiewiet resigned as a member of the Joint Administrative Board of the New York Hospital-Cornell Medical Center, effective February 1, 1951, and was succeeded by Theodore P. Wright.

*Sloan-Kettering Division Coordinating Board:* Arthur H. Dean and C. W. de Kiewiet were appointed representatives of Cornell University on the Coordinating Board of the Sloan-Kettering Division of the Medical College. Cornelis W. de Kiewiet resigned from this Board, effective February 1, 1951, and was succeeded by Theodore P. Wright.

*Board on Student Health and Hygiene:* On October 21, 1950, Harold M. Stanley was elected to the vacancy in the Board on Student Health and Hygiene caused by the death of Howard E. Babcock, for a term expiring June 30, 1951.

The following appointments of trustees to the administrative boards of the University were made on June 11, 1951, to become effective July 1, 1951:

*Joint Administrative Board of the New York Hospital-Cornell Medical Center:* Arthur H. Dean to succeed himself for a three-year term, and President Deane W. Malott to succeed Theodore P. Wright, resigned, for a two-year term.

*Board on Physical Education and Athletics:* George R. Pfann and Robert E. Treman to succeed themselves for one-year terms.

*Board on Student Health and Hygiene:* George R. Pfann, Harold M. Stanley, and Robert E. Treman to succeed themselves for one-year terms.

*Board of Governors of Willard Straight Hall:* Walker L. Cisler to succeed Ruth F. Irish for a three-year term.

#### COLLEGE COUNCILS

*Council for the New York State Veterinary College:* On October 21, 1950, Robert E. Treman was elected to fill the vacancy in the Council for the New York State Veterinary College, created by the death of Howard E. Babcock, for a term expiring June 30, 1951.

The following appointments of trustees to the college councils of the University were made on June 11, 1951, to become effective July 1, 1951:

*College of Architecture Council:* Herbert Fisk Johnson to succeed himself, and J. Carlton Ward, Jr., to succeed Victor Butterfield, for one-year terms.

*Medical College Advisory Committee:* There is one trustee vacancy on this committee.

*Council for the New York State College of Agriculture and the Agricultural Experiment Stations:* Albert K. Mitchell and George R. Pfann to succeed themselves for one-year terms.

*Council for the New York State College of Home Economics:* Mary H. Donlon and Ruth F. Irish to succeed themselves for one-year terms.

*Council for the New York State Veterinary College:* Fred H. Sexauer to succeed George R. Pfann, and Robert E. Treman to succeed himself, for one-year terms.

*Council for the New York State School of Industrial and Labor Relations:* John L. Collyer, Mary H. Donlon, Victor Emanuel, and George R. Pfann to succeed themselves, not from the field of labor; Frank S. Columbus, Louis Hollander, and Thomas A. Murray to succeed themselves from the field of labor, all for one-year terms.

ROBERT B. MEIGS

Secretary of the Board of Trustees



## APPENDIX I

### REPORT OF THE VICE PRESIDENT FOR UNIVERSITY DEVELOPMENT

*To the President of the University:*

SIR: I have the honor to present the report of the activities of the Office of University Development for the academic year 1950-51.

During the past year, the staff of the Office of University Development has devoted its primary efforts to the following:

1. Completion of the Greater Cornell Fund Campaign.
2. Cooperation with Chairman Francis H. Scheetz, '16, in organization of the Cornell University Council and its Administrative Board.
3. Cooperation with the Executive Committee and executive secretary of the Alumni Fund Council in the reactivation of the annual giving program.
4. Conducting authorized programs for restricted objectives.
5. Cooperation with Larry E. Gubb, '16, chairman, and the Planning and Development Committee of the Board of Trustees in initiating long-range plans and processing approved projects.
6. Participation of the vice president for development as a member of the newly created on-campus committee concerned with long-range educational and development plans.
7. Organization of the annual giving campaign among non-Cornellian parents of undergraduates in the endowed colleges.
8. Promotion of special gifts, bequests, life income agreements, and grants from individuals, foundations, and corporations.

The work of the development office was under the direction of Asa S. Knowles through January 31, 1951, at which time his resignation to accept his new position as president of the University of Toledo became effective.

Cornell has derived a great many benefits from Mr. Knowles's period of service to the University. He assumed primary administrative responsibility for fund raising in July, 1948, at the conclusion of the initial organizational phases of the Greater Cornell Committee, of which Mr. Harold T. Edwards, '10, and Mr. Francis H. Scheetz, '16, were respectively chairman and vice-chairman, and the Greater Cornell Fund Campaign organization, of which John L. Collyer, '17, was national chairman and Nicholas H. Noyes, '06, and William L. Kleitz, '15, were executive vice-chairmen.

It was Mr. Knowles's task to organize the Development Office to effectively cooperate with the campaign organization and the professional fund counsel in the direction of the Greater Cornell Fund solicitation effort, the aim of which was to give every Cornellian the opportunity to subscribe to the Greater Cornell Fund. When the services of the professional fund counsel were terminated, he was the University administrative officer primarily responsible for the final phases of the campaign and its successful conclusion December 31, 1950. At the same time, the Development Office was organized and staffed, and policies were developed to meet the long-range needs of the University. A central gift records office was established, and uniform procedures for the acknowledgment of all gifts were instituted.

#### GREATER CORNELL FUND CAMPAIGN

The Greater Cornell Fund Campaign effort was officially and successfully concluded on December 31, 1950. Through the Development Office, on March 12, 1951, National Chairman John L. Collyer, '17, issued his final report showing results through February 1, 1951. He expressed his pride and gratitude to all who made the success of the campaign possible and in particular to Dr. Edmund E. Day, Dr. C. W. de Kiewiet, former Vice President Knowles,

## PRESIDENT'S REPORT

Chairman Harold T. Edwards, '10, and the members of the Greater Cornell Committee, and the more than 400 alumni and friends who gave untiringly of their time and efforts as chairmen of campaigns conducted in local areas, and also to over 4,000 workers who cooperated in obtaining gifts.

Additional funds have been received since February 1 applicable to some of the campaign objectives. The following figures summarize the results through June 30, 1951:

As of June 30, 1951, there was subscribed .....	\$12,763,044.78
Of this amount there was paid in .....	9,169,150.61
Leaving a balance of subscriptions yet to be paid of .....	3,593,894.17

The campaign objectives, as announced at the outset, and the amount of gifts and subscriptions earmarked for each are shown in Table I.

TABLE I. CAMPAIGN OBJECTIVES.

<i>Urgent Needs of the University</i>	<i>Goal</i>	<i>Amount Earmarked by Subscribers</i>
Unrestricted .....	\$ 750,000.00	\$ 3,992,734.34
Faculty salaries .....	3,000,000.00	852,327.62
Medical College .....	2,500,000.00	130,018.58
Engineering development .....	2,000,000.00	1,166,261.46
Inter-Faith center & W. W. II memorial. ....	1,500,000.00	2,046,873.96
Nuclear studies laboratory .....	1,500,000.00	1,434,188.90
Humanities .....	1,000,000.00	723,602.50
Athletic plant .....	250,000.00	19,560.00
<i>Urgent But Deferred Needs of the University</i>		
University library .....	\$6,000,000.00	\$ 167,029.92
Student dormitories .....	5,000,000.00	.....
Sports' buildings .....	3,000,000.00	1,500,000.00
Medical College .....	2,500,000.00	.....
Engineering development .....	2,000,000.00	.....
Student health building .....	1,000,000.00	500.00
<i>Gifts Resulting from Campaign</i> (Donors specified objectives other than those stated for the campaign) .....	.....	\$ 729,947.50
<b>TOTAL SUBSCRIPTIONS .....</b>		<b>\$12,763,044.78</b>

TABLE II. ANALYSIS OF UNRESTRICTED GIFTS.

<i>Total Unrestricted Subscriptions .....</i>		<b>\$3,992,734.34</b>
<b>LESS:</b>		
<i>Appropriations from Unrestricted Funds:</i>		
1947-48 campaign expense ..	\$ 79,175.70	
1948-49 campaign expense ..	461,875.03	
1949-50 campaign expense ..	345,206.00	
1950-51 campaign expense ..	163,873.33	
Provision for losses on sales of securities .....	11,715.88	\$1,061,845.94
Substitution for suspended Alumni Fund applicable to academic budget:		
1948-49 .....	\$500,000.00	
1949-50 .....	500,000.00	
1950-51 .....	450,000.00	\$1,450,000.00
Allocation to accumulated university Deficit .....	548,775.50	
<b>Total payments received on unrestricted subscriptions, June 30, 1951 .....</b>		<b>3,060,621.44</b>
<b>Unpaid Balance on unrestricted subscriptions, June 30, 1951 .....</b>		<b>\$932,112.90</b>

At the April meeting of the Board of Trustees, it was voted that the unrestricted balance of subscriptions to the Greater Cornell Fund, when paid, would be allocated to the various unfulfilled objectives of the Greater Cornell Fund as follows: Faculty salaries, 45.0 per cent; Medical College, 41.1 per cent; Engineering development, 11.4 per cent; Nuclear studies laboratory, .05 per cent; Humanities, 2.0 per cent. These percentages represent the unattained portions of these objectives.

#### CORNELL UNIVERSITY COUNCIL

The organization of the Cornell University Council to succeed the Greater Cornell Committee was approved by the Trustees in June of 1950. During the summer of 1950, organization of the Cornell University Council proceeded to the point where, after approval by the Board of Trustees at the October meeting, 164 persons were invited to membership on the Council, of whom 156 accepted.

The Administrative Board of the Council was organized at a meeting in New York City on November 17, 1950, when Francis H. Scheetz, '16, was elected chairman. Jessel S. Whyte, '13, and Edith L. Gardner, '36, were elected vice-chairman and secretary, respectively. Ex-officio officers elected were Lewis H. Durland, '30, Treasurer, and Asa S. Knowles, executive director (succeeded by Willard I. Emerson, '19, February 1, 1951). Subsequent meetings were held January 17 and March 19, 1951. Actions taken at these meetings include: (1) consideration of current restricted and annual giving campaigns and approval of policies related thereto; (2) consideration of class dues program; (3) consideration of University public relations and publicity; and (4) approval of 1951-52 fund-raising budgets.

On June 7, 1951, the Executive Committee of the Administrative Board met in Ithaca to approve recommendations of the Nominating Committee for the appointment of members-at-large, which were submitted to and subsequently approved by the Board of Trustees. Fifty-nine members of the Council whose terms had expired were re-elected, and ninety-one were newly elected. Of the total of 150 invitations extended, 37 were for a one-year term, 30 for a two-year term, and 83 for a three-year term. Through June 30, 1951, 103 acceptances had been received.

In accordance with Section VI, Paragraph 1, of the Council regulations, the first meeting of the Council members was called for October 12, 1951, at Ithaca at 2:00 p.m. The chairman and executive director were authorized to complete the plans and agenda for the meeting.

#### THE ALUMNI FUND

With the conclusion of the Greater Cornell Fund Campaign, it was necessary to re-establish the annual giving program of the Alumni Fund. This was done under the direction of Jessel Whyte, '13, president of the Alumni Fund Council, and its Executive Committee, with the cooperation of Executive Secretary Emmet Murphy, '22, who was succeeded on April 1, 1951, by H. Hunt Bradley, '26.

The University owes a real debt of gratitude to Emmet Murphy, who assumed responsibility for the Alumni Fund in July, 1944, and reorganized procedures and policies so that the Alumni Fund reached the highest amount of total unrestricted gifts in its history in 1948 just before the start of the Greater Cornell Fund Campaign. He left in April to take the position of assistant to the president of St. Thomas College, St. Paul, Minnesota.

Through the efforts of the class representatives the Alumni Fund received a total of \$172,103.32 in gifts in the 1950-51 fiscal year despite the fact that a considerable number of alumni were still paying pledges to the Greater Cornell Fund and therefore were unable to contribute to the Alumni Fund.

During the fiscal year 1950-51 the total unrestricted payments received through the Greater Cornell Fund effort and the Alumni Fund amounted to \$792,366.80. While Yale University has been conducting a well-organized and

aggressive program with her alumni on a regional basis and reputedly has slightly exceeded her objective of \$1,000,000 in unrestricted gifts for 1950-51, it seems likely that the splendid results obtained by Cornell may well stand second to those of Yale among the nation's universities.

In the next fiscal year, a serious effort will be made to establish regional committees to supplement the work of the class representatives in the solicitation of gifts for the Alumni Fund. Princeton took many years to build such an organization, and it has taken Yale four years. The expenditure of both time and money will be necessary before such an organization can be perfected for Cornell.

#### PROGRAMS FOR RESTRICTED OBJECTIVES

*Materials and Testing Laboratory.* When the Buildings and Grounds Committee opened the bids for the second step in the engineering development program, the Materials and Testing Laboratory, it was found that funds in hand were insufficient to pay for the building. The Board of Trustees voted, however, to accept the low bid for the construction of the building and proceed at this time with a special campaign to raise the \$736,000 needed to pay the balance of the cost of the Materials and Testing Laboratory. This program got under way late in the spring. A sponsoring committee of 40 Cornellians, under the chairmanship of Walker Cisler, '17, was organized to conduct the campaign. A meeting of this committee was held on June 7 in Ithaca, at which time the final organization of the campaign was discussed. This program will proceed during the 1951-52 fiscal year. Gifts totaling \$177,291.32 had been subscribed by June 30, 1951.

*H. E. Babcock Memorial Fund.* H. Edward Babcock, former Chairman of the Board of Trustees of the University, died July 12, 1950. Mr. Babcock's great achievements and important contributions to American agriculture, industry, and education made it very fitting that a living memorial be set up for him in the form of a professorship at Cornell University. A committee of his friends and associates, of which Albert K. Mitchell, '17, is chairman, set out to raise a \$500,000 fund in Mr. Babcock's memory, of which \$300,000 was to be for a professorship endowment in the School of Nutrition and an additional \$200,000 was to be for supporting funds to carry on the research program in which Mr. Babcock was so deeply interested and which promises so much for the future of our American economy and standard of living. By March, 1951, the initial \$300,000 goal had been oversubscribed, and the Board of Trustees appointed Herrell DeGraff, '37, as the first incumbent of the H. E. Babcock Memorial Professorship. On June 30, 1951, the amount in hand or pledged was \$322,106.80.

At present, a campaign is being conducted among the farmers of New York State to raise money toward the supporting fund goal. It is also expected that considerable corporation support of the research program to be undertaken by the Babcock Professor will be obtained. Active solicitation of corporations will be undertaken next fall.

A further fund-raising program for the School of Nutrition has been approved by the Planning and Development Committee and the Board of Trustees for the 1951-52 fiscal year. Plans are also being developed to activate this program next fall.

*Cornell United Religious Work Program.* One of the unachieved objectives of the Greater Cornell Fund was the provision of endowment to support the Cornell United Religious Work program. This is especially necessary because of the need for funds for the maintenance of Myron Taylor's magnificent gift of Anabel Taylor Hall, which will house the C.U.R.W. program. During the past year proposals have been made to foundations, interested individuals, and parents of World War II veterans who will be memorialized in Anabel Taylor Hall, for gifts to support the program. During 1950-51, \$33,106 was subscribed for this purpose making the total to date \$161,430.96. This activity will continue in the 1951-52 fiscal year.

*Cornell Research Laboratory for Diseases of Dogs.* The fund-raising program for the Cornell Research Laboratory for Diseases of Dogs was continued during 1950-51 and was brought to a successful attainment of the \$260,000 goal last April. A further program for fund raising with the objective of obtaining endowment or commitments from non-Cornellian sources which will assure \$40,000 annually for this project for a minimum period of ten years was approved by the Board of Trustees. This program is at present under way.

*Moakley House.* The original conception and plans for the construction of Jack Moakley House envisaged a building designed primarily to provide quarters for visiting athletic teams. Donations of approximately \$200,000 were received for this purpose during the period from 1940 to 1950. This idea has been found infeasible, however, both because of mounting costs and because further study indicated that facilities more useful to the student body were desirable. This study, which was conducted by a committee of which Robert E. Treman, '09, was chairman and Robert J. Kane, '34, was vice-chairman, resulted in recommendations to the Planning and Development Committee of the Board of Trustees, which were approved at its April meeting, further referred to the Buildings and Grounds Committee, and subsequently approved by the Executive Committee of the Board.

The new plan is to create a Jack Moakley outdoor recreational center on available land owned by the University. The recreational center will include a Jack Moakley Clubhouse with a memorial trophy room, locker rooms accommodating approximately 300 men, 150 women, and 100 Faculty, a dormitory for visiting athletic teams, and a snack bar. The plan also calls for the addition of nine holes to the present overcrowded nine-hole University course, a practice ski run for beginners, the start and finish of a newly designed Jack Moakley cross country course, an archery range, and ultimately an outdoor skating rink and other sports facilities. Solicitation of new funds is not contemplated at this time.

Approval of the plan by the donors of memorial rooms in the original project is now in the process of being obtained. All donors of \$10,000 or more have already approved, and it is anticipated that the new facilities can be made available for use in the spring of 1952.

#### ACTIVITIES OF THE PLANNING AND DEVELOPMENT COMMITTEE OF THE BOARD OF TRUSTEES

During the past year the Planning and Development Committee of the Board of Trustees has held three meetings and has devoted attention to consideration of the following:

1. Appointment of members of the Cornell University Council and its Administrative Board.
2. Formulation of fund-raising policies.
3. Approval of fund-raising projects: (a) H. E. Babcock Professorship and Memorial Fund; (b) Materials Laboratory program; (c) parents' program; (d) Cornell United Religious Work program; (e) additional program for the Cornell Research Laboratory for Diseases of Dogs; and (f) School of Nutrition building and endowment funds.
4. Approval of a formula for distribution of unrestricted funds from the Greater Cornell Fund Campaign.
5. Approval of the new Moakley House plan.
6. Recommendation that a committee be appointed by the acting president to study and recommend an over-all long-range development program for the University.
7. Discussion of policy as to housing for organized groups.
8. Approval of fund-raising budgets.

#### NON-CORNELLIAN PARENTS CAMPAIGN

One of the groups in the Cornell family most concerned about the standards of Cornell education is the parents of our undergraduates. This spring the



committee of non-Cornellian parents of undergraduates was organized under the chairmanship of Will W. White, Vice-President of Esso Export Corporation and a graduate of West Point and M.I.T., to solicit gifts from parents of non-scholarship students currently in the endowed colleges. A single letter appeal was sent late in May to approximately 3,500 parents. Total subscriptions from 82 parents amounted to \$6,987 through June 30, 1951. Additional contributions are continuing to be received.

An additional appeal is planned to parents of students who graduated since the war, since experience at Princeton has shown that this group is also very much interested in their children's university. In the fall an appeal will be sent to the parents of all endowed-college students, whether or not they are Cornellians, pointing out that there is considerable difference between the amount that they pay in tuition and the actual cost to Cornell of educating each student. The opportunity will be afforded to those so inclined to make unrestricted gifts to the University.

#### PROMOTION OF SPECIAL GIFTS, LIFE INCOME AGREEMENTS, AND GRANTS

During the past year, the University has received numerous requests for information and assistance from individuals interested in making bequests to the University. These have been processed in cooperation with the University Counsel. Information relative to the needs of the University has been furnished, and, in some cases, specific clauses for agreements and wills.

The Office has cooperated with various departments of the University in approaching individuals and organizations to obtain gifts for special purposes. In addition, the Office has cooperated with the vice-president for research in preparing and making proposals to certain foundations for support of various research projects.

During the academic year 1950-51, Cornell has been most fortunate in receiving bequests, gifts, and grants-in-aid from individuals, business organizations, and foundations in support of the activities of the University. The total amount of gifts received by the University during 1950-51 was \$5,134,247.11. A summary follows:

Gifts by corporations and business enterprises . . . . .	\$1,054,514.98
Gifts by foundations and charitable groups . . . . .	1,312,847.33
Bequests and income from trusts under wills . . . . .	432,903.68
Gifts by individuals . . . . .	2,333,981.12

TOTAL . . . . .	\$5,134,247.11
-----------------	----------------

Appended to this report is a detailed summary of gifts, bequests, and grants-in-aid classified by purpose and restriction.

#### OPERATION OF THE OFFICE OF UNIVERSITY DEVELOPMENT

Budget appropriations by the Board of Trustees for the operation of the Office of University Development were divided into two categories: (1) general expenses applicable to administration, Cornell University Council, Gift Records Office, New York office, and several programs for promotion of unrestricted gifts; and (2) campaign expenses applicable to restricted projects and chargeable against receipts therefrom.

During the year a number of substantial economies were effected in the operation of the office. The development and alumni offices were physically consolidated on the fourth floor of Day Hall, resulting in the increased efficiency of both offices.

The budget provided by the Trustees for general expense for the year 1950-51 totaled \$132,255. As of June 30, 1951, the amount expended was \$98,944.53. It was thus possible to lapse \$29,510.47, which was restored to University income.

The fund-raising budgets for restricted projects totaled \$62,300. At the close of the fiscal year, expenditures amounted to \$42,273.23. Of the balance

remaining, \$8,826.77 was carried forward and will be applicable to the 1951-52 expenses for these projects. The anticipated expenditures for a fund-raising program for the Medical College did not materialize during the year, and the entire amount budgeted for this purpose was lapsed.

The staff of the Office of University Development during the year 1950-51 has consisted of the following:

Asa S. Knowles, Vice President for University Development (resigned January 31, 1951)

Willard I. Emerson, Vice President for University Development

David Palmer-Persen, Assistant to the Vice President for University Development

J. B. McKee Arthur, Project Director, H. E. Babcock Memorial Campaign  
Eric G. Carlson, Project Director, Materials Laboratories Campaign

H. Lyford Cobb, Project Director, C.U.R.W. Campaign

Joseph D. Minogue, Project Director, Cornell Research Laboratory for Diseases of Dogs Campaign

Weyland Pfeiffer, Manager of the New York office

Carmen Canestaro, Gift Records Office manager

Throughout the year the Office has had a clerical staff adequate for the work.

It is a pleasure for me to express my gratitude to the members of the Planning and Development Committee of the Board of Trustees, under the chairmanship of Larry E. Gubb, '16, and the members of the Administrative Board of the Cornell University Council, under the chairmanship of Francis H. Scheetz, '16, for the time and effort they have devoted to matters of University development and to the formulation of policies in connection with the conduct of the work of the Office.

In addition I want to express my sincere appreciation to the officers of the Greater Cornell Fund Campaign who have given so tirelessly of their effort and time during the past three years in the conduct of the Greater Cornell Fund Campaign.

I have enjoyed working with you personally as Acting President of the University in our planning and development work and fund-raising activities. Your advice and counsel in connection with the work of this office has been most helpful and has contributed materially to the effectiveness of our program.

WILLARD I. EMERSON

Vice President for University Development

## UNIVERSITY DEVELOPMENT

SUMMARY OF GIFTS, BEQUESTS, AND GRANTS-IN-AID BY PURPOSE AND RESTRICTION

JULY 1, 1950—JUNE 30, 1951

<i>Purpose and Restriction</i>	<i>Total Amount Received</i>
Daniel Alpern Memorial Scholarship I&LR.....	\$ 1,500.00
Daniel Alpern Memorial Prize Fund.....	500.00
Allied Chemical & Dye Corp. Fellowship.....	1,800.00
Alumni Endowment Fund.....	5.00
American Cyanamid Fel. in Chem. Engr.....	1,650.00
American Hotel Association Scholarship.....	300.00
Sol Amster Scholarship Fund.....	100.00
Anheuser-Busch Scholarship—H. Ad.....	1,500.00
Anonymous Mem. Fund for Engineering No. 1.....	4,200.00
Anonymous Endowment No. 3.....	4,500.00
Anonymous Endowment No. 5.....	41,575.59
Anonymous Endowment No. 7.....	94,300.00
Anonymous Discretionary Fund.....	25,000.00
Apiculture Research Fund.....	21,714.55
Architectural General Expense.....	135.00
H. E. Babcock Professorship.....	188,057.18
H. E. Babcock Portrait Fund.....	1,050.00
Dean Bailey Portrait Fund.....	1,500.00
Edward L. Bernays Foundation Fellowship.....	2,500.00
Della S. Bishop Scholarship Fund.....	50.00
Boathouse Fund.....	11,045.00
Boston Stewards' Club Scholarship Fund.....	926.00
A. R. Brand Scholarship—Agriculture.....	600.00
Robert T. Brunson Loan Fund.....	1,000.00
Chester Buchanan Memorial Fund.....	500.00
Charles K. Burdick Scholarship.....	1,075.00
Brazilian Library Collection.....	1,192.32
Burr Book Fund.....	25.00
Carey Exhibition Prize.....	289.94
Charities Drive Scholarship.....	400.00
Chemical Engineers Loan Fund.....	335.00
Class of 1899 Endowment Fund.....	10.00
Class of 1900 Endowment Fund.....	262.00
Class of 1901 Endowment Fund.....	144.42
Class of 1916 Endowment.....	19,326.50
Class of 1950 Endowment.....	717.16
Bess Berlow Cohan Award.....	100.00
Conkling Cardiac Research Fund.....	1,000.00
Cornell Aeronautical Laboratory Fellowship.....	7,200.00
Cornell Club of Buffalo Regional Scholarship.....	1,400.00
Cornell Club of Delaware Regional Scholarship.....	488.56
Cornell Club of Chicago Regional Scholarship.....	2,085.00
Cornell Club of Cleveland Regional Scholarship.....	500.00
Cornell Club of Lehigh Valley Regional Scholarship.....	735.00
Cornell Club of Nassau County Regional Scholarship.....	200.00
Cornell Club of New England Regional Scholarship.....	550.00
Cornell Club of New York Regional Scholarship.....	6,945.50
Cornell Club of Philadelphia Regional Scholarship.....	1,616.25
Cornell Club of Pittsburgh Regional Scholarship.....	708.00
Cornell Club of Rochester Regional Scholarship.....	500.00
Cornell Club of Syracuse Regional Scholarship.....	1,950.00
Cornell Club of Washington Regional Scholarship.....	200.00
Cornell Hotel Association Scholarship.....	100.00
Cornell Parents Committee Fund.....	6,737.00
Cornell Plantations.....	225.00
Cornell Research Lab. for Diseases of Dogs—Oper.....	43,722.72
Cornell Research Lab. for Diseases of Dogs—Bldg.....	3,468.81
Cornell Special Donors' Portfolio.....	46,425.00
Cornell University Library Associates.....	632.50
Cornell University Press.....	1,700.00
CURW—Catholic Fund.....	50.00
Craigielea Mem. Educational Foundation Schol.....	150.00
F. S. Crofts Prize.....	100.00
Martha Jane Dale Scholarship in Music.....	200.00
Ruth Darville Memorial Scholarship Fund.....	4,452.66
Davis Colorado Endowment.....	900.00
Day Furniture Fund.....	25.00
Day House Fund.....	5,125.00
Dean of Women Grant Fund.....	1,072.00
Dr. de Kiewiet Trustee Fund.....	3,260.00
Departmental Development—Medical College.....	19,169.71



## UNIVERSITY DEVELOPMENT

35

<i>Purpose and Restriction</i>	<i>Total Amount Received</i>
Displaced Persons Program.....	\$ 950.00
Frank J. Doft Memorial Scholarship—H. Ad.....	750.00
Mary Donlon Endowment Fund.....	200.00
Mrs. Walter Douglas Scholarship.....	200.00
Drummond Fund.....	2,405.50
Eric Dudley Prize Fund.....	50.00
Ann Phillips Duncan Scholarship Endowment.....	2,000.00
A. Winston Dunlap Fund.....	120.00
du Pont Postgrad. Fellowship in Chemical Engineering.....	2,800.00
du Pont Postdoctoral Fellowship in Chemistry.....	4,500.00
du Pont Postgrad. Fellowship in Chemistry.....	2,200.00
Eastman Kodak Company Fellowship.....	1,750.00
Engineering Cooperative Training Plan.....	10,000.00
Engineering Development Fund.....	138,585.16
Esso 4-H Scholarship—Agriculture.....	800.00
Farr Fellowship for Research in Humanities.....	6,695.58
Federation Scholarship Fund.....	2,823.55
Willard Fiske Library Endowment.....	24.00
Foreign Student Scholarship.....	900.00
Foundry Educational Foundation Schol.....	7,000.00
Foundry Educational Foundation Expense Acct.....	500.00
Simon H. Gage Fellowship Endowment.....	100.00
William C. Geer Endowment Fund.....	3,981.99
General Scholarship Fund.....	7,531.00
General Purpose.....	15,000.00
Gifts Other Than Cash.....	4,734.57
Goldwin Smith Lecture Fund.....	100.00
Gould Research Foundation Fellowship.....	2,000.00
Greater Cornell-Alumni Fund—Unrestricted.....	792,366.80
Greater Cornell—Restricted to Fund Obj.....	31,249.08
Greater Cornell Fund—Campaign Expense.....	959.00
Greater Cornell—Restricted to Est. Funds.....	(1,166,703.43)
Greater Cornell—Gifts Other Than Cash.....	(2,055.21)
Heatley Green Scholarship Endowment.....	19,229.09
Income of Guiteau Loan Fund.....	14.47
Claude C. Harding Scholarship.....	1,000.00
Harris, Kerr, Forester & Company.....	200.00
John A. Heim Fund.....	8,800.00
Sidney Hillman Memorial Schol. Fund.....	2,000.00
Ralph Hitz Memorial Fund.....	1,000.00
Brig. General Ralph Hospital Prize.....	1,000.00
Hotel Administration Summer School Scholarship.....	180.00
Hotel Administration Scholarship Fund.....	75.00
Hotel Association of N. Y. C. Memorial Schol.....	1,000.00
Hotel Management Scholarship Fund.....	200.00
Hotel Red Book Scholarship.....	300.00
Fred P. Howard Endowment Fund.....	1,281.00
Elias Huzar Memorial Library Endowment.....	2,068.00
Infirmiry Library Fund.....	529.00
Philip Isles Trust Scholarship.....	250.00
Ithaca Westminster & CURW Fund.....	1,016.00
Ben Johnson Fund.....	15,000.00
Albert and Olive Jonas Fund.....	1,243.17
Justice Foundation Lectureship Account.....	100.00
William C. Kamerer Life Income Fund.....	12,000.00
Kappa Alpha Professorship.....	1,670.00
Father William Kelley OMI Schol. Fund.....	3,600.00
Ernest B. Kiersted Fund.....	104,615.66
Dean Dexter Kimball Portrait Fund.....	1,500.00
Mrs. Francis King Scholarship.....	50.00
Koehl, Landis & Landan Scholarship.....	150.00
Law Anonymous Scholarship.....	270.00
Law Anonymous Scholarship No. 12.....	260.00
Law Library Expense.....	850.00
Law School Prize in International Affairs.....	250.00
Library Book Expense.....	155.00
Library Special Book Account.....	640.00
Lilly Endowment Fund for Occupational Retirement.....	130,000.00
Sigmund Livingston Fellowship.....	2,000.00
Elizabeth MacDonald Home Bureau Schol. End.....	500.00
Lyon Endowment Fund.....	26,491.83
Cedric Major Fund—Medical College.....	5,000.00
Mechanical Engineer Equipment Account.....	314.74
McCormick & Company Scholarship.....	600.00
Asher D. McGowen Fund.....	50.00
John McMullen Scholarship Endowment.....	86,734.64
Men's Dormitory No. 1 Fund.....	3,725.00
Men's Dormitory No. 2 Fund.....	7,500.00

<i>Purpose and Restriction</i>	<i>Total Amount Received</i>
Leonard T. Milliman Law Income Scholarship.....	643.20
Paul H. Minton Fund.....	75,000.00
Miscellaneous Income Account.....	100.00
Moakley House Fund.....	625.00
F. B. Morrison Fel. in Livestock End.....	13,150.00
Morrison Poetry Prize Fund.....	100.00
National Assn. of Thoroughbred Breeders Schol. Fund.....	400.00
New York State Bankers Assn. 4-H Schol.....	800.00
Needham & Grohmann Inc. Scholarship.....	200.00
New York State Cannery Scholarship.....	200.00
New York State College of Agr.—Alumni Prize.....	25.00
New York State Hotel Association Schol.....	936.00
New York State Veterinary Medical Society Prize.....	50.00
Margaret Crouch Nottingham End. Fund—Income Acct.....	50.00
C. P. Oberndorf Psychiatric Library Endowment.....	2,000.00
Ohio Hotels Association Scholarship.....	250.00
James Parmelee Fund.....	10,000.00
Partridge Club Scholarship—H. Ad.....	600.00
John Faxon Fassmore Memorial Fund.....	250.00
Pennsylvania State Hotels Assn. Schol.—H. Ad.....	100.00
Phi Kappa Phi Fellowship.....	200.00
Phi Kappa Psi Scholarship Fund.....	200.00
Pick Hotel Scholarship.....	400.00
President's Fund for Needy Students.....	10.00
Procter & Gamble Fellowship in Chemistry.....	2,058.00
Psi Upsilon Professorship.....	1,685.00
William Lowell Putnam Fund.....	400.00
Charles Quillman Fellowship Endowment—Income Acct.....	531.00
Radio Corporation of America Fellowship.....	2,700.00
Rare Books and Manuscripts Account.....	10,980.00
John & Maude St. John Reamer Memorial Fund.....	5,000.00
Research Grants—Endowed Colleges.....	674,740.60
Research Grants—Medical College.....	783,537.88
Research & Invest. Grants—State Colleges.....	216,721.42
James E. Rice Memorial Poultry Library.....	21,000.00
James E. Rice Memorial Poultry Library—Income Acct.....	4,358.82
Nettie M. Roods Scholarship Endowment.....	2,000.00
Flora Rose Scholarship Endowment.....	2,000.00
Rosenwald Foundation for CURW.....	10,000.00
Mr. & Mrs. Georges C. St. Laurent Scholarship.....	999.96
Martin Sampson Fellowship.....	500.00
Joseph Schlitz Brewing Company Scholarship.....	10,500.00
P. A. Schoellkopf Memorial Fund.....	12,690.01
Sears Roebuck Foundation Scholarship.....	3,800.00
Semi-Centennial Endowment Fund.....	760.00
John L. Senior Endowment Fund.....	57,462.50
Shell Fellowship in Chemistry.....	1,650.00
Sigma Xi Fellowship.....	500.00
Silent Hoist & Crane Company Materials Handling Prize.....	5,000.00
Fred A. Simonsen Scholarship.....	500.00
Skidmore Scholarship in Architecture.....	1,000.00
Social Science Research Center.....	25.00
Edward Goodman Sperry Fund.....	10,000.00
Standard Oil Co. of Indiana Fellowship.....	1,750.00
Standard Oil Co. of Ohio Fellowship in Chemistry.....	2,100.00
Nettie A. Stanton Endowment.....	200.00
Statler Foundation Fund.....	357,500.00
Ward W. Stevens Scholarship Endowment.....	150.00
Joseph L. Stichter Endowment.....	1,808.87
Stouffer Corporation Endowment.....	1.00
Student Agencies Endowment.....	250.00
Student Aid—Medical College.....	25,958.32
Student Relief Fund.....	286.35
Elmer E. Studley Endowment Fund.....	9,388.00
Anabel Taylor Fund.....	600,000.00
Teagle Foundation Scholarship.....	51,576.00
Texas Company Fellowship.....	3,300.00
Thorp Memorial Fund.....	8,502.00
Waldo F. Tobey Fund.....	75.03
Trautwine Fund for Civil Engineering.....	10,816.46
R. H. Treman Memorial Fund.....	512.72
United States Rubber Company Fellowship.....	2,200.00
University Development Fund.....	372.04
George R. Van Namee Endowment.....	1,000.00
Martha Van Rensselaer Schol. Endowment.....	2,100.00
Veterinary Poultry Prize.....	250.00
Viking Fund Fellowship.....	6,000.00
Visking Corporation Fellowship.....	2,250.00

<i>Purpose and Restriction</i>	<i>Total Amount Received</i>
Pop Warner Most Valuable Football Player Fund.....	2,203.40
Westinghouse Fellowship in Mechanical Engineering.....	1,000.00
Andrew J. Whinery Memorial Schol. Endowment.....	819.00
J. du Pratt White Professorship.....	225.00
Henry Shaler Williams Memorial Fund.....	250.00
Lyman P. Wilson Memorial Fund.....	116.50
Ludwig Wölfert Fund.....	.48
Woodruff Professorship.....	9,728.35
<b>TOTAL.....</b>	<b>\$5,134,247.11</b>

## APPENDIX II

## REPORT OF THE VICE PRESIDENT-BUSINESS

*To the President of the University:*

SIR: The business operations of the University for the year of this report were carried out under the trying conditions of inflation and an unsettled world situation. Commendation is due the manager of each business operation for a successful year.

The areas and extent of operations within this office are as follows:

	<i>Income</i>	<i>Expense</i>	<i>Net Income</i>	<i>Reserve June 30, 1951</i>
<i>Endowed Budget Operations:</i>				
Vice President's office....	\$ 26,798.49			
Buildings and Grounds....	528,838.16			
Personnel.....	16,282.71			
Purchasing.....	57,021.77			
General business expense..	87,644.60			
Payments to utilities.....	273,344.46			
<b>TOTAL, ENDOWED....</b>	<b>\$ 989,930.19</b>			
<i>Self-supporting Activities:</i>				
Residential Halls.....	\$2,250,688.74	\$2,250,044.86	\$ 643.88	\$166,303.87
Purchasing stores and services.....	1,243,839.34	1,129,316.79	114,522.55	290,844.53
University Press.....	220,810.02	210,545.70	10,264.32	180,523.12
Photo Science.....	40,492.90	45,217.96	-4,725.06	-112,722.45
Station WHCU.....	208,583.26	171,172.61	37,410.65	130,977.00
<i>Utilities:</i>				
Electricity.....	139,265.16	99,421.33	39,843.83	....
Heat.....	637,518.96	637,518.96	....	....
Water.....	70,190.30	70,190.30	....	....
B. & G. work orders.....	672,660.11	672,660.11	....	....
<b>TOTAL, RELATED....</b>	<b>\$5,484,048.79</b>	<b>\$5,286,088.62</b>	<b>\$197,960.17</b>	<b>\$655,926.07</b>

Interdepartmental charges are included in the above data so that the totals represent the aggregate of each respective department's or agency's operations. The net income of the electricity operation was credited to endowed budget income.

*Department of Buildings and Grounds* (Robert M. Mueller, Superintendent). The year was marked by expanded activity in the department with particular emphasis placed upon rehabilitation and improvement of the older but sound buildings. A uniform scheduling of future repair and reconstruction work has

been initiated with a resulting efficiency in the use of the department's labor force. Salaries, wages, and material costs increased substantially during the year, but the increases were absorbed within the original budget allowance.

The new construction of Anabel Taylor Hall, approximating \$2,000,000, was contracted for during this year. The University quarry was opened to furnish native stone for the project. This operation is being carried out under lease from the University and has been very successful in reducing the cost of the native stone which is so important to the beauty of our campus. The Materials Testing and Processing Building, to cost approximately \$1,700,000, got under way during the year. The Research Laboratory for Diseases of Dogs was completed in January, 1951. The department designed and constructed the livestock breeding and hay barn and a new cow stable for the Artificial Breeders Cooperative. The Sage College dormitory is being modernized and substantially reconstructed by department forces. The program will be completed during this and the next summer vacation periods. Major alterations to the hydroelectric plant and the Beebe Lake dam were initiated late in the year and will be completed during the summer.

*Personnel* (Diedrich K. Willers, Director). It has become increasingly difficult to recruit secretarial and clerical help and technicians because of increased industrial activity in this area and the reactivation of Sampson as an Air Force base. It has been necessary to intensify greatly our recruiting work.

During the year a complete employee relations program for all nonacademic employees was formalized; and the benefits of pay increases, social security coverage, and improved sick leave were worked out. Following the announcement of this program pursuant to trustee action in November, the University experienced a strike by relatively few of its service employees. The dispute was settled amicably with the International Union, and the University was able to carry forward its program of improved employee relations.

The University has undertaken a complete job classification of all nonacademic employees and the establishment of uniform salary and wage schedules. The major part of the work was completed by July 1, 1951, and all salaries below the minimum of respective job classifications were increased to the minimum. Some part of the work was carried over the year end but has been made effective as of July 1, 1951.

*Purchasing* (George S. Frank, Manager). This department handled purchases aggregating more than \$4,225,000 during the year. This has been done under conditions of higher prices, delayed deliveries, scarcities, allocations, priorities, and government controls. The department administers the Federal Surplus Property Program and has secured materials and equipment valued at approximately \$115,000 for about \$10,000.

College stores and services handled \$1,235,000 in issues and work during the year. Over \$650,000 of this total was in general materials and supplies from the central store; Electronics Stores handled issues over \$100,000; the Print Shop volume was \$177,000; and the Typewriter Division service load was \$78,000. The Chemical Stores issues exceeded \$200,000 for the year, but over \$100,000 of that total represents inventory transferred to the Chemistry Department. As of July 1 issuance of chemical supplies to students from the stock rooms has been turned over to the Chemistry Department.

The reserves of the purchasing department affiliated services have been materially improved. They are somewhat higher than required, and appropriate adjustment will be made during the coming year.

*Residential Halls* (M. R. Shaw, Manager). The University cared for 3,011 students in its own housing—1,228 women and 1,783 men. There were 483 veterans' families housed at various times during the year in the 299 apartments provided under the emergency housing program.

Income to this department is essentially fixed by contract for a year in advance. In the face of this situation, severe management problems were encountered in rising food prices and increased wages during the year. A break-even result was maintained. Continued price and wage increases necessitated

increased rates for the coming year, and the trustees approved room rent increases of 10 per cent for the men and an increase in room and board for women from \$850 to \$895 for 1951-52.

Substantial headway was made in overcoming deferred maintenance items. The repair and replacement program was financed from current funds and \$23,000 from the accumulated reserve maintained for that purpose. The present reserve will be practically extinguished when the Sage College Dormitory reconstruction is completed.

*University Press* (Victor Reynolds, Manager). The operations of Comstock Publishing Company, Inc., are included above with those of the University Press. By the year end the entire operation was merged with the Press and the corporate status discontinued. A total of twenty-eight new titles was published, along with regular issues of four learned journals. During the year an arrangement was made by the Press to act as distributor of the publications of The Folger Shakespeare Library, Washington, D.C. Our Press continues to move ahead among the leaders of university publishers and without cost to the University budget.

*Photographic Science Laboratory* (Victor Reynolds, Manager). This operation has concluded a second year of effort to break even. During the year the volume of business declined 20 per cent because of reduction in expenses by all University departments. The deficit reflected for the year's operations is \$4,725, but equipment and inventory recoveries of \$1,901 reduced this loss to \$2,824. The accumulated deficit of \$112,722 presents a real problem, but more than half of that item is represented by valuable equipment. Every effort is being made to integrate this operation with the radio and television possibilities on the campus. We are hopeful that this can be done effectively.

*Radio Station WHCU* (Michael R. Hanna, Manager). This University activity covers an important area of community service. Some 55 per cent of its programs originate locally, and the balance are from the Columbia Broadcasting System. Nearly 35 per cent of the station's time on the air is given over to news and public-interest programs. The home station and its interrelation with the Rural Radio Network provide an outlet for programs from several sources in the University.

The attainment of harmony between education and our station's self-supporting operation is a worthy challenge. The future of most radio stations calls for television. This intensifies the need for harmony and at the same time provides new opportunities for building educational programs more strongly into our self-supporting operations. We do not see how educational television or educational radio can "go it alone" and provide programs to cover a station's all-day coverage with a result that will hold the station's audience. We see the future as one of achieving a practical cooperation between the University community and the radio and television broadcasting industry.

JOHN E. BURTON  
Vice President-Business



## APPENDIX III

## REPORT OF THE VICE PRESIDENT FOR RESEARCH

*To the President of the University:*

SIR: I have the honor to report on the activities of the Office of Vice President for Research for the academic year 1950-51.

The most conspicuous fact in the sponsored research picture at Cornell for the fiscal year 1950-51 is the large gain in over-all volume, the annual effort having risen from approximately \$9,500,000 to \$11,500,000 during the period of this one year. In part the rise in dollar volume reflects the increased cost of operating research projects, but there has been a notable increase in the number of projects undertaken at the University as well, this having risen from about 1,217 separate sponsored projects for the previous year for the departments and branches embraced by this report, to about 1,280 for the current year.

It might be assumed that this rapid rise in dollar volume was primarily a reflection of the effect of the Korean War and of the mobilization program, but we have ample evidence to indicate that the increase stems in large measure from a healthy growth rather than from concentration of research monies on military or quasi-military projects.

It is with great pleasure that we are able to report that the pressure of war and war economy has not yet become so overbearing that we have had to depart from the established policy of keeping the campus free of "classified" research.

## VOLUME OF RESEARCH AT CORNELL

As indicated above, the dollar volume of sponsored research at Cornell is now \$11,500,000, a rise of \$2,000,000 over the 1949-50 figure. Although the Cornell Aeronautical Laboratory, Inc., at Buffalo continues to be the branch of the University primarily devoted to military applied research, yet the increased over-all research effort is evenly distributed throughout the branches of the University. The volume of research at C.A.L. has risen by \$800,000, but remains, nonetheless, at 38% of the University's total. A comparison of the amount of research in the subdivisions of the University for this year and last is shown in the table below.

TABLE I

Group	Location	1949-1950		1950-1951		% of change
		Millions of Dollars	%	Millions of Dollars	%	
Endowed Colleges.....	Ithaca	1.6	17	1.9	16	-1
State Colleges.....	Ithaca	3.3	35	4.0	35	0
Medical College.....	New York City	1.0	10	1.2	11	+1
C.A.L.....	Buffalo	3.6	38	4.4	38	0
Total.....		9.5	100	11.5	100	

The figures quoted herein represent only research that is supported financially by outside agencies. There is a great deal of individual research carried on within every College as part of the normal activities of the staff; and it is this intensely personal research effort which is the very life-blood of the University as a great *teaching* institution. This is indeed contemplated and encouraged as evidenced by our practice in preparing academic budgets to designate staff salaries under the heading "Instruction and Research."



## SOURCES OF IMPLEMENTING FUNDS—FEDERAL GOVERNMENT

Federal support continues to be a powerful factor in research at Cornell. Increased Government support has been given to the research program in every division of the University, although the *ratio* of Government support to total research remains as during the previous year at 79 per cent. There have been slight shifts percentagewise among the several divisions.

TABLE II

## SOURCES OF IMPLEMENTING FUNDS FROM FEDERAL GOVERNMENT SUPPORT

	1948-1949	1949-1950	1950-1951
	%	%	%
Endowed Colleges.....	67	62	58
State Colleges.....	87 (State 76; Fed. 11)	93 (State 78; Fed. 15)	94 (State 81; Fed. 13)
Medical College.....	31	24	35
C.A.L.*.....	89	87	86
University Average....	77.3	79	79

\* As part of the balance that is contracted with industry is in the form of subcontracts on the Government prime contracts awarded to the companies, these percentages really amount to 96% for 1948-1949; 92% for 1949-1950; and 97.6% for 1950-1951.

The figure of 86% for Federal support in the Cornell Aeronautical Laboratory is the ratio of *prime* Government contracts to the total. If Government subcontracts through industry are included, this percentage rises to 97.6, a gain of 5.6% in Federal support over the previous years. In view of the immense mobilization effort now getting underway, this is not surprising. In the past year, as in the year before, the research at the Cornell Aeronautical Laboratory has been predominantly *applied* and much of it is "classified." It is fortunate indeed that the University is able thus to round out its obligation to the nation by being able to undertake necessary military applied research at a point off-campus where there will be no interference with academic freedom.

Our relationships with the several Government agencies have remained excellent, particularly with the Office of Naval Research which has continued during the past year to be the prime supporter of fundamental research.

## CORPORATION GRANTS AND OTHER SOURCES OF SUPPORT

As indicated by Table III, below, corporation grants for research have undergone a healthy rise during the past year. Sources other than Government account now for 21% of total funds, and of these, roughly half comes from corporations, the next largest contributor being foundations. Research supported from the Cornell budget by specific grants has, however, shown a decline during the year, falling from 2.8% to 1.6% of the total effort. This is in part due to the absorption of the staff on sponsored research projects, albeit this is a matter of free choice on the part of the individuals concerned. The percentage of support for research received from trade associations and individuals has not changed significantly.

TABLE III

PROPORTION OF SUPPORT AVAILABLE TO STAFF OF UNIVERSITY  
FOR RESEARCH, FROM SOURCES OTHER THAN GOVERNMENT

	1948-1949	1949-1950	1950-1951	% Change
Corporations.....	9.2%	8.8%	10.1%	+1.3
Trade Associations.....	1.2%	0.9%	1.4%	+0.5
Individuals.....	3.5%	2.8%	1.9%	-0.9
Foundations.....	6.5%	5.7%	6.0%	+0.3
Cornell Budgets *.....	2.3%	2.8%	1.6%	-1.2
Total.....	22.7%	21.0%	21.0%	

\* These are funds specifically earmarked for research. Additional effort is expended of substantial but indeterminate amount by the staff throughout the University. For the most part this includes small projects deriving from the curiosity and eagerness to learn inherent in the makeup of any great teacher. It is, in fact, implied that such will be the case in the terminology of the Cornell Budget wherein the salary expense of Staff is indicated as "for salary and research."

FIELDS OF ENDEAVOR ENCOMPASSED BY RESEARCH PROJECTS

Although classified research, which is inevitably largely applied research, has been excluded from the campus, this fact alone would not assure a proper balance between basic and applied research. The table below shows the ratio of fundamental to applied research in the various divisions of the University.

TABLE IV

Colleges	Fundamental	Applied
Endowed.....	85% (\$1,582,000)	15% (\$279,100)
State.....	35% (\$1,396,400)	65% (\$2,605,000)
Medical.....	90% (\$1,102,500)	10% (\$122,500)
Subtotal.....	58% (\$4,080,900)	42% (\$3,006,600)
C.A.L.....	10% (\$441,400)	90% (\$3,972,700)
GRAND TOTAL.....	39% (\$4,522,300)	61% (\$6,979,300)

In the fields of human activity covered by the Cornell research effort there has been a sharp rise in monies devoted to the Social Sciences and Humanities.

During the last year a generous gift of \$300,000 was received from the Ford Foundation for the work of the Social Science Research Center during its organizational phase; \$60,000 of this grant was applied to this fiscal year. Extremely generous support has also been forthcoming for a wide variety of specific research from other Foundations in the field of the Social Sciences, with the result that the funds devoted to research in this area increased by more than \$100,000 from the preceding year.

Also noticeable has been the increase—over 100%—in expenditures for research in the Humanities. While the absolute sums in this area look small when compared with those in some of the other disciplines, it must be borne in mind that expensive equipment and materials are seldom required in this field and work of large importance can often be done without heavy expense.

In view of the well-known fact that there are periodic "fashions" in research and that we are now in a period of inevitable emphasis on physical sciences and engineering, the increasing amount of sponsored research in the Social Sciences and the Humanities at Cornell is especially worthy of note.

TABLE V  
FIELDS OF ENDEAVOR

	Last Year		This Year	
	\$	%	\$	%
Aeronautics (C.A.L. only).....	3,636,000	38.4	4,414,100	38.3
Agriculture.....	2,804,000	29.7	3,632,500	31.5
Engineering.....	496,000	5.2	539,800	4.7
Humanities.....	32,000	0.3	69,400	0.6
Medicine and Nutrition.....	1,135,000	12.0	1,322,800	11.6
Physical and Biological Sciences.....	730,000	7.7	767,800	6.7
Social Sciences.....	440,000	4.7	541,900	4.7
Veterinary Sciences.....	186,000	2.0	213,300	1.9
Totals.....	9,459,000	100.0	11,501,600	100.0

#### RESEARCH CENTERS AT CORNELL

Already established are the Cornell Social Science Research Center and the Cornell Center for Integrated Aerial Photographic Studies. There have been two additions during the past year to these flourishing Research Centers.

In June 1950 the Daniel and Florence Guggenheim Foundation through Mr. Harry Guggenheim provided funds for the establishment of the Daniel and Florence Guggenheim Aviation Safety Center at Cornell University, an administrative body nationwide and even international in its interests which will be the rallying point for air safety research throughout the country.

A Housing Research Center was also established at Cornell during this past year and embraces various disciplines of both the upper and lower campuses. Two Government contracts have already been received from the Housing and Home Finance Agency as well as funds for the support of a cooperative project with the Russell Sage Foundation.

#### UNIVERSITY BUDGET—IMPACT OF RESEARCH ACTIVITIES

The importance of the research effort upon the University budget continues to be significant. For the fiscal year just past, approximately \$365,000 in recovered salaries and overhead resulted from the sponsorship of research by Government and industry.

TABLE VI  
UNIVERSITY INCOME FROM GOVERNMENT  
CONTRACTS (ENDOWED COLLEGES)  
(FIGURES ROUNDED TO EVEN THOUSAND)

	Budgeted Salaries	Overhead		Total
	Recovered Through Government Reimbursement	On Recovered Salaries	On Non-Budgeted Salaries	Income From These Sources Affecting University Budget
1946-1947.....	\$ 47,000	\$26,000	\$ 66,000	\$ 92,000
1947-1948.....	75,000	38,000	112,000	150,000
1948-1949.....	125,000	62,000	141,000	203,000
1949-1950.....	129,000	64,000	192,000	256,000
1950-1951.....	124,000	62,000	184,000	246,000
(Est.)				
1951-1952.....	140,000	70,000	209,000	279,000
(Est.)				

## PRESIDENT'S REPORT

## ASSOCIATED OFF-CAMPUS RESEARCH ACTIVITIES

A closer educational relationship has grown up during the year with the Cornell Aeronautical Laboratory as a result of a sharp expansion in personnel needs at that institution. Increasing use is being made and will continue to be made of University staff in the research effort at Buffalo. This will take the form of consulting appointments; of the employment by C.A.L. of University personnel on sabbatic leave or leave of absence; and of overtime work on the part of certain groups of University staff who will, so to speak, operate as "subcontractors" at Ithaca on blocks of work which can be brought here from Buffalo. C.A.L. is also supporting seven research fellowships named for the aviation companies which donated the original working capital and facilities for the Laboratory.

An increasing number of our personnel, both of teaching staff and graduate assistants, are finding summer employment at Brookhaven National Laboratory of which Cornell is one of nine trustees under a contract with the Atomic Energy Commission.

## UNIVERSITY RESEARCH POLICY

The University policies on patents and on acceptability of research in the Endowed Colleges have remained unchanged during the past year. The report "Research at Cornell" issued in April includes a large number of photographs and descriptions of interesting research projects underway during the year. This has proved to be an acceptable innovation among the recipients of this annual publication.

T. P. WRIGHT  
Vice President for Research

## APPENDIX IV

## REPORT OF THE REGISTRAR

*To the President of the University:*

SIR: I have the honor to submit herewith the annual report of the Registrar. It covers the academic year 1950-51, including the Summer Sessions of 1950 and, for convenience, work between the end of the spring term, 1950, and July 1, 1950, but excluding work between the end of the spring term 1951 and July 1, 1951.

TABLE I. TERMS OF INSTRUCTION FOR THE YEAR 1950-51

	<i>Days in Session*</i>
<i>At Ithaca</i>	
Summer Session, University..... July 3-August 12.....	31 †
Summer Session, Engineering (Industrial Cooperatives)..... June 12-Sept. 16.....	84
Fall term..... Sept. 18-Jan. 31.....	101
Thanksgiving recess..... Nov. 22-26.....	(subtracted)
Christmas recess..... Dec. 21-Jan. 3.....	(subtracted)
Midyear recess..... Feb. 1.....	(subtracted)
Spring term..... Feb. 2-June 5.....	99
Spring recess..... March 25-April 1.....	(subtracted)
Spring Day, a holiday..... May 12.....	(subtracted)
<i>At New York City:</i>	
<i>Medical College</i>	
Summer term (for 4th-year students)..... July 10-Sept. 2.....	48
Fall term..... Sept. 14-Dec. 2.....	67
Columbus Day, a holiday..... Oct. 12.....	(subtracted)
Thanksgiving recess..... Nov. 23.....	(subtracted)
Winter term..... Dec. 4-March 3.....	70
Christmas recess..... Dec. 23-Jan. 2.....	(subtracted)
Lincoln's birthday, a holiday..... Feb. 12.....	(subtracted)
Washington's birthday, a holiday..... Feb. 22.....	(subtracted)
Spring vacation..... March 4-11.....	(subtracted)
Spring term..... March 12-June 5.....	73
Memorial Day, a holiday..... May 30.....	(subtracted)
<i>School of Nursing</i>	
Third term..... May 15-Sept. 30, 1950.....	117
(Memorial, Independence, and Labor Day subtracted)	
First term..... Oct. 2-Jan. 20.....	92
(Columbus, Thanksgiving, Christmas, and New Year's day subtracted)	
Second term..... Jan. 22-May 12.....	94
(Lincoln's and Washington's birthdays subtracted)	
Third term..... May 14-Sept. 29, 1951.....	117
(Memorial, Independence, and Labor Day subtracted)	

\* Sundays excluded throughout.

† Saturdays also excluded, excepting Saturday, July 8, and Saturday, August 12.



## PRESIDENT'S REPORT

TABLE II. ATTENDANCE FOR THE ACADEMIC YEAR 1950-51.

The cross totals for the year in Ithaca include (a) "double registrants" (i.e., students registered in two divisions of the University at the same time; see tabulation below) and (b) students registered in one division for the fall term and in another for the spring term. The grand totals exclude all duplicate registrations (see tabulation below).

*In Ithaca:*

College	Fall Term			Spring Term			Total for Year		
	M	W	T	M	W	T	M	W	T
Agriculture.....	1,495	175	1,670	1,327	163	1,490	1,549	185	1,734
Architecture.....	167	51	218	160	47	207	180	55	235
Arts & Sciences...	1,867	795	2,662	1,780	750	2,530	1,920	814	2,734
Business & Public Admin.....	105	2	107	101	2	103	108	2	110
Engineering.....	1,678	11	1,689	1,536	10	1,546	1,747	12	1,759
Graduate School..	1,264	221	1,485	1,165	211	1,376	1,406	248	1,654
Home Economics...	...	623	623	...	606	606	...	631	631
Hotel Admin.....	356	20	376	345	23	368	400	23	423
Ind. & Labor Relations.....	257	46	303	246	42	288	281	50	331
Law.....	446	14	460	435	14	449	447	14	461
Nutrition.....	33	10	43	35	8	43	38	10	48
Veterinary Medicine	189	3	192	189	3	192	191	3	194
Total registrations.	7,857	1,971	9,828	7,319	1,879	9,198	8,267	2,047	10,314
Double registrants.	55	3	58	58	3	61	58	3	61
Less double registrants.....	7,802	1,968	9,770	7,261	1,876	9,137	8,209	2,044	10,253
Other duplicates...	...	...	...	...	...	...	90	17	107
Total enrolled (less all other duplicates).....							8,119	2,027	10,146

*In New York City:*

	First Term		Second Term		Third Term				
	M	W	M	W	M	W			
Medical College...	311	24	311	24	311	24	311	24	335
School of Nursing..	...	180	...	168	...	159	...	180	180
	311	204	311	192	311	183	311	204	515

## GRAND TOTALS

(Excluding duplicates)..... 8,430 2,231 10,661

## (a) Double Registrants

	Fall Term			Spring Term			Total for Year		
	M	W	T	M	W	T	M	W	T
Arts—Business Administration....	22	2	24	23	2	25	23	2	25
Arts—Law.....	19	..	19	19	..	19	19	..	19
Arts—Medical.....	3	..	3	3	..	3	3	..	3
Agriculture—Nutrition.....	4	..	4	5	..	5	5	..	5
Engineering—Business Administration	4	..	4	4	..	4	4	..	4
Engineering—Law.....	3	..	3	3	..	3	3	..	3
Home Economics—Nutrition.....	..	1	1	..	1	1	..	1	1
Hotel—Business Administration...	..	..	..	1	..	1	1	..	1
TOTAL.....	55	3	58	58	3	61	58	3	61

TABLE II (CONT.)

(b) *Other Duplicates*

(Registered both terms but in different divisions of the University)

	<i>Fall Term</i>			<i>Spring Term</i>		
	<i>M</i>	<i>W</i>	<i>T</i>	<i>M</i>	<i>W</i>	<i>T</i>
Agriculture.....	11	5	16	2	3	5
Architecture.....	2	..	2	7	1	8
Arts & Sciences.....	17	9	26	23	5	28
Business & Public Administration.....	1	..	1	..	..	..
Engineering.....	57	..	57	20	..	20
Graduate.....	1	..	1	22	5	27
Home Economics.....	..	3	3	..	3	3
Hotel Administration.....	..	..	..	5	..	5
Industrial & Labor Relations.....	1	..	1	11	..	11
TOTAL.....	90	17	107	90	17	107

TABLE III. ATTENDANCE AT SUMMER SESSIONS, EXTRAMURAL COURSES, ETC., 1950-51.

	<i>Men</i>	<i>Women</i>	<i>Total</i>
Six-week Summer Session (1950):.....	1,031	668	1,699
Cornell graduate students (included above).....	241	125	366
Unit courses.....	191	138	329
TOTAL (excluding duplicates).....	1,222	806	2,028
Extramural courses:			
Fall term.....	89	71	160
Spring term.....	89	89	178
TOTAL (excluding duplicates).....	137	129	266
Summer (1950).....	91	3	94
In Graduate School:			
Under Personal Direction (summer, 1950).....	425	28	453
Candidates for degree only.....	76	24	100
Resident doctors.....	3	2	5
Engineering Industrial Cooperative.....	37	0	37
Civil Engineering Summer Survey.....	39	0	39

## PRESIDENT'S REPORT

TABLE IV. NUMBER OF STUDENTS IN EACH COURSE IN THE PAST FIVE YEARS.

	1946-47	1947-48	1948-49	1949-50	1950-51
Agriculture.....	1,660	1,619	1,725	1,765	1,734
Architecture.....	208	229	220	223	235
Arts & Sciences.....	2,522	2,551	2,482	2,573	2,734
Business & Public Admin.....	41	94	120	121	110
Engineering.....	2,667	2,648	2,367	2,068	1,759
Graduates.....	1,217	1,391	1,505	1,594	1,654
Home Economics.....	640	632	619	638	631
Hotel Admin.....	417	414	430	425	423
Ind. & Labor Relations.....	277	316	345	347	331
Law.....	355	378	377	411	461
Medicine.....	322	315	319	326	335
Nursing.....	233	213	122	152	180
Nutrition.....	20	42	54	47	48
Veterinary Medicine.....	133	145	189	197	194
TOTAL (excluding duplicates).....	10,560	10,830	10,673	10,669	10,661

TABLE V. MATRICULANTS, 1950-51.

	Men	Women	Total
(a) Candidates for undergraduate degrees:			
Agriculture.....	555	52	607
Architecture.....	43	19	62
Arts & Sciences.....	669	251	920
Engineering.....	479	4	483
Home Economics.....	...	190	190
Hotel Admin.....	122	10	132
Ind. & Labor Relations.....	80	9	89
Nursing.....	...	72	72
Veterinary Medicine.....	29	...	29
TOTAL.....	1,977	607	2,584
(b) Candidates for graduate degrees:			
Aeronautical Engineering.....	7	1	8
Business & Public Admin.....	28	...	28
Graduate School:			
Fall and spring.....	462	100	562
Summer.....	48	38	86
Law.....	130	4	134
Medicine.....	62	3	65
Nutrition.....	11	4	15
TOTAL.....	748	150	898
(c) Special students (noncandidates):			
Two-year course in agriculture.....	111	7	118
Other specials.....	73	23	96
TOTAL.....	184	30	214
Total matriculants, 1950-51.....	2,909	787	3,696
For comparison { 1949-50.....	2,558	812	3,370
1948-49.....	2,382	736	3,118
1947-48.....	2,422	654	3,076
1946-47.....	2,353	642	2,995

TABLE VI. GEOGRAPHIC DISTRIBUTION OF STUDENTS IN ITHACA.

For the academic year 1950-51 students enrolled at Ithaca represented every state in the Union and the District of Columbia, four territories, and sixty-six foreign countries.

<i>States</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>	<i>Territories</i>			
Alabama.....	14	2	16	Alaska.....	2	...	2
Arizona.....	7	...	7	Hawaii.....	16	2	18
Arkansas.....	7	1	8	Canal Zone.....	4	...	4
California.....	70	16	86	Puerto Rico.....	11	1	12
Colorado.....	22	4	26				
Conn.....	208	36	244	TOTALS.....	33	3	36
Delaware.....	26	8	34				
Florida.....	53	10	63	<i>Foreign</i>			
Georgia.....	18	6	24	Afghanistan.....	9	...	9
Idaho.....	7	...	7	Argentina.....	1	...	1
Illinois.....	153	16	169	Australia.....	3	...	3
Indiana.....	32	5	37	Austria.....	3	...	3
Iowa.....	15	...	15	Belgian Congo...	1	...	1
Kansas.....	7	3	10	Belgium.....	2	...	2
Kentucky.....	17	3	20	Bermuda.....	1	...	1
Louisiana.....	8	2	10	Bolivia.....	2	...	2
Maine.....	31	12	43	Brazil.....	11	...	11
Maryland.....	114	26	140	Burma.....	1	...	1
Mass.....	264	52	316	Canada.....	84	11	95
Michigan.....	89	17	106	Ceylon.....	1	...	1
Minnesota.....	24	6	30	Chile.....	...	1	1
Miss.....	3	1	4	China.....	42	8	50
Missouri.....	48	3	51	Colombia.....	5	...	5
Montana.....	9	1	10	Costa Rica.....	5	...	5
Nebraska.....	15	3	18	Cuba.....	1	2	3
Nevada.....	2	...	2	Cyprus.....	1	...	1
N. H.....	35	7	42	Dominican Rep...	2	...	2
New Jersey.....	601	142	743	Ecuador.....	...	1	1
New Mexico.....	11	2	13	Egypt.....	5	1	6
New York.....	4,672	1,362	6,034	England.....	14	3	17
N. C.....	16	3	19	Ethiopia.....	1	...	1
N. D.....	6	2	8	Finland.....	4	...	4
Ohio.....	244	40	284	France.....	5	2	7
Oklahoma.....	12	5	17	Germany.....	9	10	19
Oregon.....	10	1	11	Gold Coast.....	1	...	1
Pa.....	490	80	570	Greece.....	6	...	6
R. I.....	23	6	29	Guatemala.....	3	...	3
S. C.....	20	2	22	Haiti.....	3	...	3
S. D.....	3	...	3	Holland.....	3	...	3
Tennessee.....	16	6	22	Honduras.....	2	...	2
Texas.....	27	11	38	Iceland.....	2	...	2
Utah.....	24	1	25	India.....	14	3	17
Vermont.....	32	9	41	Iran.....	2	...	2
Virginia.....	65	25	90	Iraq.....	8	...	8
Washington.....	27	4	31	Israel.....	4	2	6
W. Va.....	33	4	37	Italy.....	2	...	2
Wisconsin.....	47	2	49	Jamaica B.W.I. .	1	1	2
Wyoming.....	6	...	6	Japan.....	5	...	5
D. C.....	53	19	72	Korea.....	4	...	4
				Lebanon.....	1	1	2
TOTALS.....	7,736	1,966	9,702	Mexico.....	14	1	15

## PRESIDENT'S REPORT

TABLE VI. (CONT.)

<i>Foreign (Cont.)</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>	<i>Foreign (Cont.)</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>
Nepal.....	1	...	1	So. Africa.....	1	...	1
Netherlands W.I..	1	1	2	Spain.....	1	...	1
Nicaragua.....	...	1	1	Sweden.....	3	...	3
Nigeria.....	2	...	2	Switzerland.....	2	...	2
Norway.....	9	3	12	Trinidad.....	1	...	1
Nova Scotia.....	1	...	1	Turkey.....	3	...	3
Pakistan.....	...	1	1	Uruguay.....	2	...	2
Panama.....	1	...	1	Venezuela.....	7	2	9
Peru.....	2	...	2	Wales.....	1	...	1
Phil. Is.....	10	2	12				
Portugal.....	1	...	1	TOTALS.....	350	58	408
Saudi Arabia.....	2	...	2				
Scotland.....	3	...	3	GRAND TOTALS....	8,119	2,027	10,146
Siam.....	8	1	9				

TABLE VII. UNDERGRADUATE AVERAGES.

In the summer of 1938 the Registrar's office began, at the urgent request of the National Interfraternity Conference and with the approval of the President of the University, the computation of undergraduate averages for the preceding academic year. The computation was continued annually for the succeeding years until World War II disrupted fraternity life; then it was abandoned until the summer of 1947.

The averages of certain groups of undergraduates for the past four years and, for comparison, the averages of a decade ago are presented below. The most striking fact about the 1949-50 averages is that, for the first time since the original computation of relative standings, the average for fraternity men is higher than that for all men and the average for sorority women is higher than that for all women.

<i>Group</i>	<i>1939-40</i>	<i>1946-47</i>	<i>1947-48</i>	<i>1948-49</i>	<i>1949-50</i>	<i>Net Change in 10-Year Interval</i>
All undergraduates....	76.22	76.73	76.88	77.42	77.47	+1.25
Undergraduate men...	74.60	76.36	76.46	77.05	77.01	+2.41
Undergraduate women..	77.84	78.00	78.48	78.94	79.33	+1.49
Fraternity men.....	74.08	76.04	76.08	76.65	77.09	+3.01
Sorority women.....	77.84	77.77	78.19	78.78	79.45	+1.61
Independent men.....	75.11	76.56	76.74	77.42	76.93	+1.82
Independent women...	77.85	78.10	78.70	79.09	79.23	+1.38



TABLE VIII. DEGREES.

September 1950; February 1951; June 1951

<i>Degrees</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>
Bachelor of Arts . . . . .	395	160	555
Bachelor of Science (a)* . . . . .	313	34	347
Bachelor of Science (b)* . . . . .	...	137	137
Bachelor of Science (c)* . . . . .	104	5	109
Bachelor of Science (d)* . . . . .	73	12	85
Bachelor of Science in Nursing . . . . .	...	38	38
Bachelor of Architecture . . . . .	35	1	36
Bachelor of Science in Land Planning . . . . .	2	...	2
Bachelor of Fine Arts . . . . .	5	12	17
Bachelor of Civil Engineering . . . . .	29	...	29
Bachelor of Science in Civil Engineering . . . . .	1	...	1
Bachelor of Mechanical Engineering . . . . .	53	...	53
Bachelor of Electrical Engineering . . . . .	34	...	34
Bachelor of Chemical Engineering . . . . .	43	2	45
Bachelor of Metallurgical Engineering . . . . .	9	...	9
Bachelor of Engineering Physics . . . . .	13	1	14
Bachelor of Laws . . . . .	122	7	129
Master of Aeronautical Engineering . . . . .	5	...	5
Master of Nutritional Science . . . . .	7	1	8
Master of Food Science . . . . .	5	1	6
Master of Business Admin. . . . .	38	...	38
Master of Public Admin. . . . .	2	...	2
Master of Arts . . . . .	44	34	78
Master of Science . . . . .	96	61	157
Master of Science in Agriculture . . . . .	25	1	26
Master of Science in Education . . . . .	19	17	36
Master of Science in Engineering . . . . .	1	...	1
Master of Science in Ind. & Labor Relations . . . . .	19	4	23
Master of Architecture . . . . .	1	...	1
Master of Landscape Architecture . . . . .	2	...	2
Master of Fine Arts . . . . .	3	1	4
Master of Regional Planning . . . . .	5	...	5
Master of Education . . . . .	10	1	11
Master of Chemical Engineering . . . . .	4	...	4
Master of Civil Engineering . . . . .	12	...	12
Master of Electrical Engineering . . . . .	19	...	19
Master of Mechanical Engineering . . . . .	12	...	12
Doctor of Education . . . . .	3	...	3
Doctor of Veterinary Medicine . . . . .	47	...	47
Doctor of Philosophy . . . . .	238	20	258
Doctor of Medicine . . . . .	77	10	87
<b>TOTALS . . . . .</b>	<b>1,925</b>	<b>560</b>	<b>2,485</b>

\* (a) means Agriculture, (b) Home Economics, (c) Hotel Admin., (d) Industrial & Labor Relations.

TABLE IX. NUMBER AND KINDS OF DEGREES GRANTED BY CORNELL UNIVERSITY  
(BY YEARS).

	<i>Before 1947</i>	1947	1948	1949	1950	1951	<i>Total</i>
Architects.....	1						1
Bachelors of Arts.....	13,859	544	639	612	611	555	16,820
Bachelors of Agriculture.....	30						30
Bachelors of Architecture.....	824	21	26	29	46	36	982
Bachelors of Chemistry.....	823						823
Bachelors of Chemical Engineering.....	86	43	51	67	82	45	374
Bachelors of Civil Engineering.....	305	55	97	110	97	29	693
Bachelors of Electrical Engineering.....	139	25	74	87	162	34	521
Bachelors of Engineering Physics.....						14	14
Bachelors of Fine Arts.....	39	2	6	15	9	17	88
Bachelors of Landscape Architecture.....	82		1				83
Bachelors of Laws.....	2,602	51	106	148	99	129	3,135
Bachelors of Letters.....	264						264
Bachelors of Literature.....	52						52
Bachelors of Mechanical Engineering.....	339	78	127	148	117	53	862
Bachelors of Metallurgical Engineering.....						9	9
Bachelors of Philosophy.....	484						484
Bachelors of Science.....	3,712						3,712
Bachelors of Science (College of Agric.).....	3,752	221	246	325	414	347	5,305
Bachelors of Science (College of Home Ec.).....	2,136	108	170	145	149	137	2,845
Bachelors of Science (Hotel Admin.).....	673	78	89	109	95	109	1,153
Bachelors of Science (Ind. & Labor Relations.....		11	81	81	87	85	345
Bachelors of Science in Adm'n. Engineering.....	574	24	68	118	55		839
Bachelors of Science in Agriculture.....	357						357
Bachelors of Science in Architecture.....	123						123
Bachelors of Science in Chemical Engineering.....	66						66
Bachelors of Science in Chemistry.....	9						9
Bachelors of Science in Civil Engineering.....	60	28	13	9	4	1	115
Bachelors of Science in Electrical Engineering.....	65	30	19				114
Bachelors of Science in Land Planning.....						2	2
Bachelors of Science in Mechanical Engineering.....	183	72	54	22	11		342
Bachelors of Science in Natural History.....	4						4
Bachelors of Science in Nursing.....	64	54	74	36	27	38	293
Bachelors of the Science of Agriculture.....	127						127
Bachelors of Veterinary Science.....	4						4
Chemical Engineers.....	91						91
Civil Engineers.....	3,067						3,067
Electrical Engineers.....	813						813
Forest Engineers.....	17						17
Graduate in Pharmacy.....	1						1
Mechanical Engineers.....	6,282						6,282
Pharmaceutical Chemists.....	2						2
Masters in Forestry.....	86						86
Masters of Aeronautical Engineering.....			4	6	5	5	20
Masters of Architecture.....	46		2	6		1	55
Masters of Arts.....	2,182	51	79	86	87	78	2,563
Masters of Arts in Education.....	84						84
Masters of Business Admin.....			33	48	46	38	165
Masters of Chemical Engineering.....	8	3	5	2	3	4	25
Masters of Chemistry.....	23						23
Masters of Civil Engineering.....	315	10	9	8	12	12	366
Masters of Education.....	4			3	4	11	22
Masters of Electrical Engineering.....	57	1	5	13	12	19	107
Masters of Fine Arts.....	9	1		1	4	4	19
Masters of Food Science.....		1	3	14	4	6	28
Masters of Landscape Architecture.....	8					2	10
Masters of Landscape Design.....	21						21
Masters of Laws.....	69	1	1				71
Masters of Letters.....	9						9
Masters of Nutritional Science.....			8	14	9	8	39
Masters of Mechanical Engineering.....	289	5	2	5	15	12	328
Masters of Public Admin.....				2	5	2	9
Masters of Regional Planning.....	4	3	7	4	2	5	25
Masters of Philosophy.....	10						10
Masters of Science.....	1,636	102	131	137	124	157	2,287
Masters of Science in Agriculture.....	502	28	44	37	27	26	664
Masters of Science in Architecture.....	19						19
Masters of Science in Education.....	304	46	58	38	44	36	526
Masters of Science in Engineering.....	162	19	20	16	7	1	225
Masters of Science in Ind. & Labor Relations.....	1	1	8	10	11	23	54
Masters of Veterinary Medicine.....	1						1
Doctors of Education.....						3	3
Doctors of Laws (Honorary).....	2						2
Doctors of Medicine.....	2,733	83	78	68	78	87	3,127

TABLE IX. (CONT.)

<i>Degrees</i>	<i>Before</i>						<i>Total</i>
	<i>1947</i>	<i>1947</i>	<i>1948</i>	<i>1949</i>	<i>1950</i>	<i>1951</i>	
Doctors of Philosophy.....	3,446	95	156	178	210	258	4,343
Doctors of Science.....	20	..	..	..	..	..	20
Doctors of the Science of Law.....	8	1	..	..	..	..	9
Doctors of Veterinary Medicine.....	1,391	35	1	41	51	47	1,566
TOTAL DEGREES.....	55,560	1,931	2,595	2,798	2,825	2,485	68,194
War Alumni Certificates.....	320	..	..	..	..	..	320

TABLE X. AGE AT GRADUATION.

The age of Cornell students at graduation has been recorded at ten-year periods from 1870 to 1900 and at five-year periods since 1900. For the sake of brevity, the ages for only two of the latest periods have been printed annually since 1940; anyone wishing a longer view of these statistics may obtain it from earlier reports.

In general, the median age of the class of 1950 was noticeably more advanced (especially among the men) than the median age of the class of 1945. For this there were two reasons: (1) the class of 1945 in most divisions of the University had advanced the time of their graduation by wartime "acceleration"; (2) the class of 1950 contained a good many men whose time of graduation had been retarded by war service.

	<i>Class of 1945</i>			<i>Class of 1950</i>		
	<i>Minimum</i>	<i>Median</i>	<i>Maximum</i>	<i>Minimum</i>	<i>Median</i>	<i>Maximum</i>
Agriculture						
Men.....	20-1	22-10	29-10	18-11	23-11	37-10
Women.....	20-0	21-10	40-4	20-4	21-4	33-3
Architecture						
Men.....	19-6	21-7	30-9	21-8	25-1	29-11
Women.....	19-11	22-6	23-9	20-11	22-1	22-7
Arts & Sciences						
Men.....	18-11	21-	35-8	19-11	22-6	33-2
Women.....	19-1	21-	37-1	19-11	21-7	26-7
Engineering						
Men.....	19-	20-10	31-3	21-3	24-2	33-4
Women.....	20-4	20-11	21-5	28-10	28-10	28-10
Home Economics						
Men.....	29-9	22-	22-5	19-11	21-8	54-4
Women.....	19-	21-	26-2	...	...	...
Hotel Administration						
Men.....	...	...	...	20-8	24-8	32-8
Women.....	...	...	...	22-9	24-2	25-7
Industrial & Labor Relations						
Men.....	...	...	...	20-3	24-2	34-10
Women.....	...	...	...	20-7	21-9	26-5
Veterinary Medicine						
Men.....	21-2	22-6	28-11	22-0	28-10	39-5
Women.....	24-9	24-9	24-9	35-3	35-3	35-3
Masters						
Men.....	19-11	27-1	66-2	21-2	25-7	56-3
Women.....	20-5	26-10	63-3	22-3	24-3	41-2
Doctors of Philosophy						
Men.....	22-7	29-5	56-11	24-3	30-0	46-10
Women.....	28-8	38-	45-9	24-6	28-11	36-4
Law						
Men.....	23-2	24-7	26-2	21-10	26-4	35-5
Women.....	21-5	23-4	30-8	23-4	23-6	23-9
Medicine						
Men.....	22-9	24-7	31-10	22-4	25-10	35-4
Women.....	23-1	24-10	26-10	22-2	25-4	37-1
Nursing						
Women.....	20-6	22-11	31-2	21-10	23-9	25-5

TABLE XI. INTRAMURAL TRANSFERS

Four years ago, to facilitate transfers within the University and to ensure the maximum possible opportunities for them, the several undergraduate colleges agreed that the Registrar's office should receive all applications for intramural transfer, transmit the applications along with the students' records to the appropriate committees, notify each college of the students wishing to come in or go out by transfer, and act as a kind of "clearing house" for the several committees on admissions. The following table shows the applications for transfer to and the acceptances by the undergraduate divisions for the two terms of 1950-51.

	<i>Fall Term Applicants for Transfer</i>	<i>Accepted</i>	<i>Spring Term Applicants for Transfer</i>	<i>Accepted</i>
Architecture . . . . .	20	11	9	9
Arts & Sciences . . . . .	56	35	50	27
Chemical Engineering . . . . .	2	2	..	..
Civil Engineering . . . . .	5	5	5	2
Electrical Engineering . . . . .	4	4	2	2
Mechanical Engineering . . . . .	13	8	9	8
Engineering Physics . . . . .	3	3	2	2
Hotel Admin. . . . .	12	6	17	5
Agriculture . . . . .	7	3	9	5
Home Economics . . . . .	6	2	7	3
Ind. & Labor Relations . . . . .	10	5	26	10
TOTALS . . . . .	138	84	136	73

These figures show the situation with respect to intramural transfers to be somewhat less "tight" than it was four years ago. The acceptances for the two terms of 1950-51 were 61 per cent and 54 per cent as compared with only 23 per cent and 43 per cent for the two terms of 1946-47.

E. F. BRADFORD  
Registrar

## APPENDIX V

## REPORT OF THE DEAN OF THE UNIVERSITY FACULTY

*To the President of the University:*

SIR: I have the honor to present the report of the University Faculty for 1950-51.

There were included in the Faculty membership during part or all of the year 1,252 persons whose rank and place of service are shown in Table I. Under the heading "Administration" are listed only those officers who do not have academic titles in addition to their administrative designations.

TABLE I.

	<i>Professors Emeritus</i>	<i>Pro- fessors</i>	<i>Assoc. Professors</i>	<i>Asst. Professors</i>	<i>Adminis- tration</i>	<i>Total</i>
Residence:						
Ithaca . . . . .	96	400	242	180	18	936
Geneva . . . . .	9	20	20	6	..	55
New York . . . . .	17	35	78	109	..	239
Elsewhere . . . . .	17	..	4	1	..	22
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
TOTAL . . . . .	139	455	344	296	18	1252

Twenty-four members of the Faculty died during the year: George Woolsey, Professor of Clinical Surgery, Emeritus, July 1, 1950; Edwin Nungezer, Associate Professor of English, July 10, 1951; Emile Monnin Chamot, Professor of Chemistry, Emeritus, July 27, 1950; Joshua Alban Cope, Professor of Forestry, August 26, 1950; Riverda Harding Jordan, Professor of Education, Emeritus, September 11, 1950; Ralph Griffiths Stillman, Assistant Professor of Medicine, November 16, 1950; Phillip Henry Wessels, Professor of Vegetable Crops, Emeritus, November 30, 1950; Lewis Atterbury Conner, Professor of Clinical Medicine, Emeritus, December 12, 1950; George Julius Heuer, Professor of Surgery, Emeritus, December 15, 1950; George Gray Ward, Professor of Obstetrics and Gynecology, Emeritus, December 20, 1950; Elias Huzar, Associate Professor of Government, December 28, 1950; William DeWitt Andrus, Professor of Clinical Surgery, January 20, 1951; Hervey Clock Williamson, Professor of Clinical Obstetrics and Gynecology, February 1, 1951; Albert Bernhardt Faust, Professor of German, Emeritus, February 8, 1951; Edmund Ezra Day, President Emeritus, March 23, 1951; Robert Walter Hunt, Associate Professor of Clinical Surgery, March 31, 1951; William Logie Russell, Professor of Psychiatry, Emeritus, March 31, 1951; Heinrich Ries, Professor of Geology, Emeritus, April 11, 1951; Lyman Perl Wilson, Professor of Law, April 20, 1951; John Thomas Parson, Professor of Engineering Drawing, Emeritus, April 28, 1951; Earle Nelson Burrows, Associate Professor of Structural Engineering, May 6, 1951; Forest Miles Blodgett, Professor of Plant Pathology, June 11, 1951; and Julian Pleasant Bretz, Professor of American History, Emeritus, June 15, 1951.

Eight members of the Faculty retired from their official positions during the year and were elected to the emeritus status: Connie Guion, Professor of Clinical Medicine (June 30, 1951); Eugene Davis Montillon, Professor of Landscape Architecture (June 30, 1951); George Papanicolaou, Professor of Clinical Anatomy (June 30, 1951); Clifford Nicks Stark, Professor of Bacteriology (June 30, 1951); Homer Columbus Thompson, Professor of Vegetable Crops (June 30, 1951); Leland Eugene Weaver, Associate Professor of Poultry Husbandry (June 30, 1951); Ralph Hicks Wheeler, Professor in Extension Service (June 30, 1951); and Paul Work, Professor of Vegetable Crops (June 30, 1951).



During the year one hundred and three members left the ranks of the Faculty either by resignation or because of termination of contract period. Forty-three members were on sabbatic leave during the year and ten were on special leaves.

#### NEW LEGISLATIVE PROCEDURES

With the growth of the University, its organization has become more complex, and it has been increasingly difficult for its Faculties to play the role assigned to them by statute and precedent in matters concerning academic policy. Formerly the deans of the various divisions of the University played an important role in the deliberations of the University Faculty. For many years they constituted the Committee on University Policy. With the development of the Deans' Conference, there has been a marked tendency for the deans to become more closely associated with the administration and less active as members of the University Faculty. A valuable feature of the organization of our Faculties is the high degree of autonomy possessed by the several college and school Faculties. The University Faculty has recognized this by tending to refrain from action which might infringe the authority of the special Faculties. These Faculties have in general restricted their legislation to internal problems. It has thus come about that the academic interests of the University have been the concern of three agencies: the Deans' Conference, the University Faculty, and the special Faculties. These agencies have operated independently of one another with consequent lack of coordination.

This academic year has seen two developments, each of which promises to make the Faculty at large more efficient as a source of academic policy than it has recently been. The first of these has come into use to meet particular situations, and, as far as I know, has not been previously commented upon as a new development. It promises to bridge the gap between the Deans' Conference and the University Faculty in a helpful way. The second was a deliberate attempt on the part of the University Faculty to improve its relations with the special Faculties.

On several occasions a proposal has originated in the Deans' Conference, and, after study there by a special committee, has been referred to the Committee on University Policy with the suggestion that it be recommended to the University Faculty for action. In some cases there have been conferences between the special committee and the Committee on University Policy to adjust the details of the proposed legislation. In every case constructive action by the University Faculty has resulted. The deans, because of their intimate knowledge of the academic problems of the University, are uniquely qualified to suggest changes. It is to be hoped that this procedure may be increasingly used.

The University Faculty has constituted a Standing Committee on Inter-Faculty Relations, consisting of one member of each of the special Faculties selected as that Faculty shall determine and the chairman of the Committee on University Policy, who serves as chairman of the new committee. The principal function of the committee is to aid the Committee on University Policy in the study of problems which are of concern to the special Faculties. This should save much time in the consideration of questions which would otherwise have to be referred to each Faculty for consideration and report. Although not formally organized until the middle of the academic year, its establishment has already been justified by its contributions.

#### THE EMERITUS RANK

The University has never had any stated policy regarding appointments to the emeritus rank. The need for such a statement was discussed in both the Deans' Conference and the Committee on University Policy and in conference between them. This resulted in a statement of policy approved by the conference, the committee, the University Faculty, and the Board of Trustees. The plan provides for but one rank, Professor Emeritus, to which members of the Faculty who at time of retirement have tenure, are at least sixty years of age,

and have been members of the academic staff for at least twenty years may be appointed. In cases of exceptional merit the condition of twenty years of service may be waived. More important than the details of this statement of policy is the method by which the decision was reached.

Both procedures were used in a proposal to eliminate the rank of Faculty Instructor which originated in the Deans' Conference. It was a complicated problem, since the By-Laws of the University contained provisions regarding maximum period of service and registration in the Graduate School which had been recommended by the University Faculty. Several colleges were concerned and had diverse interests. A solution was found through the cooperation of the Committee on Inter-Faculty Relations which has met the approval of the University Faculty and the Board of Trustees.

#### THE UNIVERSITY PROFESSORSHIP

The acceptance by the Board of Trustees of a gift for the endowment of a University Professorship raised questions which were of interest both to the University Faculty and to the special Faculties. This rank was not defined at Cornell, and the relation of a University Professor to the colleges and the departments of the University as well as his membership in the various Faculties were questions which needed prompt solution. The newly organized Committee on Inter-Faculty Relations cooperated with the Committee on University Policy in a study of these problems. It was the first task assigned to this committee, and the prompt sounding of opinion in the several schools and colleges which it made possible was invaluable in the formulation of a statement of University policy.

The joint report of the two committees was transmitted by the University Faculty to the Board of Trustees, with the result that the Board amended the By-Laws as recommended by the Faculty, and the University Faculty adopted a statement of policy and enacted provisions governing the academic relations of a University Professor after these matters had been discussed in the Board of Trustees.

During the year, there has been more than one occasion for proposed legislation to be referred back and forth between the Board of Trustees and the University Faculty in the endeavor to find a formulation satisfactory to both bodies. The amendment of the By-Laws to provide for a procedure to be followed in case of the dismissal of a member of the Faculty and the clarification by the Faculty and the Board of Trustees of the grounds for such dismissal was also effected by this procedure. This method of handling legislation of interest to both bodies seems preferable to unilateral action taken by one and adopted by the other.

#### THE STANDING COMMITTEES

The Committee on Student Activities has examined the charters and practices of student organizations whose announced purposes are primarily social and whose practices have come under some criticism. No legislation with regard to these has been recommended, but the study will be continued. At the request of the Deans' Conference, the committee undertook a study of the desirability of a system of deferred fraternity rushing. A subcommittee of three members, under the chairmanship of Professor Arnold Hanson, met jointly with a committee of three representatives of the Interfraternity Council to make an initial fact-finding study of the subject and to report both to the Committee on Student Activities and to the Interfraternity Council. This joint subcommittee made its report in May, and the committee voted to hold open hearings on the general subject of deferred rushing before taking any further action. The committee has also given considerable attention to the improvement of conditions in the conduct of week-end parties, especially those of Spring Day, and consideration of this problem will be continued during the coming year.

The Committee on Student Conduct has considered 95 cases during the year. Of these, 45 involved students who were reprimanded by the chairman for minor infractions of University or City of Ithaca rules, and in which the actions of the chairman were formally approved by the committee. The following represents a breakdown of the actions taken by the committee in the remaining 50 cases: suspension—1, suspension for one term—1, parole—10, reprimand—14, deprivation of driving privileges—15, and no cause for action—9.

The Committee on Student Conduct does not in general accept cases involving breach of contract on the part of students. The committee has, however, voted to assume jurisdiction in case a student breaks a contract with the armed forces with respect to participation in an ROTC program. This action was taken in accordance with the recommendations of the Association of NROTC Colleges.

The Committee on Undergraduate Scholarships, with the consent of the University Faculty, has made a change in the basis of award of the University Undergraduate Scholarships and the George W. LeFevre Scholarships. The basis has been two scholastic aptitude tests, an achievement test in English, and two other achievement tests of the College Entrance Examination Board. The requirement of these achievement tests has limited the number of candidates available for the scholarships. In the future the awards will be made on the basis of the scholastic aptitude tests.

During the academic year, the Committee on University Lectures has sponsored three series of Messenger Lectures, consisting of six lectures each: Professor Thomas A. Bailey, Stanford University, six lectures on "Russian and American Relations"; Dr. Jens Clausen, Carnegie Institution of Washington, Stanford, six lectures on "Stages in Evolution of a Plant Species"; and Professor William F. Albright, Johns Hopkins University, six lectures on "Higher Culture and Environment in Ancient Civilization." The committee has also sponsored twelve lectures on the Schiff Foundation, eleven lectures on the Goldwin Smith Foundation, three lectures on the Woodruff Foundation, and two on the Victor Emanuel Foundation.

The Committee on Music has reason to feel that the two series of concerts that it sponsored were among the most successful in recent years, both from the standpoint of attendance and of artistic value. The Bailey Hall series consisted of seven recitals by: Zino Francescatti, tenor; Rudolph Serkin, pianist; Elena Nicolaidi, contralto; the Minneapolis Symphony Orchestra; the Little Orchestra, with John Kirkpatrick, pianist; the Shaw Chorale; and Andres Segovia, guitarist. Despite the limitations of the hall, the first appearance at Cornell of Mr. Segovia, one of the greatest musical personalities of modern times, was an event of real significance.

The Willard Straight Chamber Music series consisted of five concerts: a recital by the sonata team of Blancard and DeRibaupierre; the New York Woodwind Quintet; and recitals by the Budapest, the Hungarian, and the Walden String Quartets. Inclusion of the Walden Quartet, always popular and generous with their time, made it possible also for their participation in the Festival of Contemporary Arts.

CARLETON C. MURDOCK  
Dean of the University Faculty

## APPENDIX VI

## REPORT OF THE DEAN OF THE GRADUATE SCHOOL

*To the President of the University:*

SIR: I have the honor to present the report of the Graduate School for the year 1950-51:

## I

The Graduate School was established March 12, 1909, on recommendation of the University Faculty approved by the Board of Trustees. In 1923 the Graduate Faculty reviewed and revised the legislation governing its School; the action was repeated in 1932. On initiative of the General Committee, the Graduate Faculty has been tidying up once more. Apparently, barnacles have to be cleaned away periodically, and the School rigged afresh for further voyaging.

Two years ago, the General Committee appointed a subcommittee to initiate a survey, to consult with representative groups of Faculty, and to propose necessary corrective measures. During the academic year under review, the subcommittee zealously applied itself to its task by meeting regularly once a week, by consulting and advising with groups of Faculty and with the General Committee, and by preparing and disseminating approved proposals. The membership of the subcommittee was: Professors Damon Boynton, Dwight Gunder, L. A. Maynard, Henry Myers, and L. P. Smith, Chairman. I take this opportunity to express the thanks of the Graduate Faculty to this subcommittee and to the General Committee, who contributed time and solid thought to fruitful ends.

In a series of meetings held late in the spring term, the Graduate Faculty reaffirmed old practices or voted changes. Armed with these actions of the Faculty, the General Committee proposes now to codify rules and procedures, to publish the code for use of faculty members and students, to replace the present *Announcement* with an informative bulletin, and to initiate the administrative and instructional changes ordered by the Faculty. I hope that by the end of the next academic year there will be general understanding about Graduate School policy and procedure.

Granted that faculties are usually conservative, I still find noteworthy how little the revised constitution differs from that adopted at the inception of the School. The Faculty of 1909 was far-sighted indeed. In fact, a number of revisions voted this spring were returns to a policy from which there had been deviations.

The statement of the purpose and nature of graduate study was altered some in diction, but not in intent:

"It is the purpose of the Graduate School to offer facilities for advanced study and research so that students may obtain a comprehensive view of a field of knowledge and receive the training required for independent investigation in that field. In providing this opportunity, the School makes it possible for the student to associate freely with mature scholars who will give him such aid and direction as he may need. Accomplishment is judged primarily by the evidence of growing responsibility for the advancement of knowledge and not by fulfillment of routine requirements or by courses and credits. The Faculty of the School requires of all candidates for degrees a period of study in residence, the mastery of some one subject, an adequate acquaintance with allied subjects, the passing of a final examination, and the presentation of a satisfactory thesis."

This statement of purpose applies to what the Graduate Faculty regards as its primary concern: educational programs leading to the general degrees of M.A., M.S., and Ph.D. Specifically, the Faculty re-emphasized the vital importance of residential study and development of independence, the non-departmental and non-collegiate pattern of the School, and the principle that individual Graduate Faculty members, essentially selected by the students, are responsible for the fundamentals of degree programs. After twelve years' experience, the Faculty drew back its foot from a path it had hesitantly stepped down, by eliminating the two "plans" governing study in candidacy for the Masters' degrees.

The Graduate School at Cornell University now finds itself in virtually a unique position among graduate schools of the country. Few educators would deny the validity of these adopted principles, which animated the first graduate schools in America. But many, including a sizable fraction of our Faculty, believe that changed conditions now preclude adherence to these principles. The increase in size and complexity of our schools, the departmentalization and specialization of knowledge, the gargantuan laboratories and libraries, the range of attributed purposes of advanced degree programs, and the changes in sources of sponsorship are some of the reasons why the majority of graduate schools are now partially or wholly committed to different policies for graduate study, usually including non-resident study, sometimes under a partially non-resident faculty, a fulfillment of requirements by prescriptions and credits, departmental and collegiate regulation and organization, and a separation of graduate faculty members, or a portion of them, from undergraduate teaching and other university functions.

The Faculty sponsors of the adopted legislation had closely to assess the values of these divergent practices. They had to judge the components of this University in its setting as well as to agree on educational values. They had to study a variety of systems, both new and old, and judge as accurately as possible their effects upon students, upon citizens, and upon the scientific and scholarly progress of the country. They were influenced in their conclusions not only by oral and published opinions, but also by letters from fifty alumni who received doctorates here fifteen years ago and who kindly, thoughtfully, and in many instances nostalgically replied to queries. I interpret the result as a negation of machinery in higher education and a militant support of personal and philosophical values. Certainly this code continues to allow room for both the worst and the best graduate instruction in the country. No regimens have been adopted for forcing students to conform to a pattern. Written into this code is the belief that a curious and conscientious student acquires both science and philosophy by organic and not mechanical means.

The code differentiates between the aims of the general degree programs and those programs leading to the fourteen professional Masters' degrees and the two professional doctoral degrees under jurisdiction of this Faculty. Though the Faculty believes it valuable for the professional degrees to be under legislative jurisdiction of the Graduate School and has even requested inquiry about means for placing all advanced degrees on this footing, it has voted to release all administration and instruction for professional degrees from the normal procedures of the Graduate School. It feels that this differentiation will make clear the differences in purpose.

## II

Though the Graduate Faculty expressed a gratifying unanimity, its actions may be more aspirational than real unless the University makes a sustained and fruitful effort to improve existing conditions. I have already listed reasons why many faculties no longer adhere to similar policies. Other systems of education assure certain advantages, such as a highly specialized proficiency and at least a minimal acumen in holders of degrees. It is all very well for a Faculty to vote for an informal personal relationship between individual faculty members and mature students residing in a circle of the arts and sciences for the purpose of



developing philosophical scholars and scientists. But results depend upon proper residence in a proper environment. Vigilance cannot be superficial. I list some present weaknesses that must be corrected if the educational policy is to justify itself:

(1) The sheer physical conditions for residence are not right. Graduate students need dormitories and apartments. These are mature students; undergraduate quarters, even if they were available, are not satisfactory. Graduate study is a way of life, and graduate students live it, or should live it, every hour of the day. If there is to be exchange of thought and perception on any but an elementary level, mature students should live together with the other mature students of the advanced professional schools, not in undergraduate rooming houses or in trailers at the edge of the county.

(2) The blind cannot lead the blind along the path to knowledge. Students learn equally from faculty and their fellow students. If neophytes are to become scientists, they need to associate more with scientists than with non-scientists.

There are many reasons why non-scientists are appointed to the faculty for admirable special qualities needed by the University for special reasons. It is too much to expect a faculty of this size to be composed only of philosophers. But the University has expanded enormously, especially in material ways, and the variety of special reasons for appointment has increased disproportionately. Other programs of the University have expanded faster than has basic graduate education. Moreover, these other programs are often the first concern of those who select faculty, whereas the Graduate School must draw its Faculty from such selections. Still further, science has expanded its horizons so rapidly that at the periphery much that is questionable as science travels under the name. It is at this periphery and not at the center that many recent appointments have been made. As the country seems to have learned with respect to undergraduate education, free election, which the Graduate School has just reaffirmed as a principle, is excellent only so long as all that may be elected is equally educational. If we are to require graduate students to choose among faculty, we must by one means or another be vigilant that a high percentage of the faculty are philosophers or philosophical scientists, accorded proper recognition so that students may know them. Since appointment and recognition are not the responsibility of the Graduate Faculty, I can only urge vigilance by reporting to you.

(3) But students learn equally from each other, and in this respect a frontal attack within the School is possible and necessary. If students are to learn from each other, there must be initiative among them. The student body must be pump-primed. Not only must some of the best young minds available be secured for the sake of science and the welfare of the country, but they must be secured for the sake of our Graduate School. They supply the inspiration, leadership, stimulation, and education of other students by their ability to set the direction of flow of thought. To secure such individuals requires fellowships and scholarships more numerous and ample than any envisioned by the officials of the University at any time during these last thirty inflationary years. In behalf of the Faculty I stress, as I and my predecessors have been stressing in these annual reports, that in this respect we have slept while the world has moved on.

(4) The Faculty has favored philosophy and the circle of arts and sciences. But we have busied ourselves in recent years with all sorts of devices for breaking that circle. New buildings for special disciplines and for no disciplines at all have arisen on- and off-campus. But the one building which most obviously unifies knowledge has deteriorated—the Library. Many of the alumni who wrote testified how much of their education came not only from the books but from fellow-students in carols and stacks. Others lamented how inadequate, even fifteen years ago, were the facilities. As a true university is a collection of books, so is the unity of knowledge found in its library. Of course, departmental libraries are a convenience and necessity, but the prevalent opinion that they suffice indicates how far we have fallen into specialism. Our pattern



of individual instruction will perpetuate narrow cells if we do not induct students to universal knowledge.

I have not exhausted the list of actions that are needed if the educational policy defined by the Graduate Faculty is to have substance; but these actions are central. If the affirmed policy remains an aspiration only, then it would be better if we adopted a system of prescriptions and formulas, holding faculty and students alike to those segments of knowledge which can be intensely cultivated, which can find their support from government, industry, foundations, cooperatives and the like because they serve the special interests of the sponsors, which will train selected students along selected lines, perhaps under a system of professional apprenticeship which will intensify their training without particular concern for developing perception.

### III

Other actions affecting the Graduate School are:

Five fields of instruction have voted to require the Graduate Record Examination of applicants for admission for fall, 1952, and thereafter. They are: Conservation, English, Geology and Geography, History and Zoology. Mr. G. V. Lannholm, Director of the Graduate Record Examination for the University Testing Service held a series of discussions with interested members of the Faculty for the purpose of explaining the operation of the Examination.

With the sponsorship of the Graduate School and under the direction of Mr. Victor Reynolds, the staff of the Cornell University Press presented in the amphitheater, Statler Hall, four colloquia on methods and problems of publishing. These colloquia, arranged in consultation with Mr. Henry Silver of the American Council of Learned Societies, have stimulated similar projects in other graduate schools.

By Faculty action, the postwar period of acceleration was terminated by rescinding of temporary legislation.

On recommendation of the Faculty, the Board of Trustees approved a plan for graduate fellowships and scholarships which allows appropriated amounts to be carried over to a second year whenever it is possible to double the stipend by such action.

The Faculty voted that its Secretary will be their representative on the Committee on Inter-college Affairs.

On recommendation of the Dean of the Graduate School, you approved suspension of graduate student allotments for the year 1951-52 without abrogating the principle of student allotments.

By action of the Board of Trustees, tuition for graduate work in endowed fields was increased to \$250.00 a semester.

By action of the Board of Trustees, assistants in endowed departments will no longer be eligible for waiver of tuition.

On recommendation of the Graduate Faculty, the Board of Trustees established the post of Associate Dean of the Graduate School and appointed Professor J. C. Hinsey, Dean of the Medical School, as first incumbent.

During the year, the Graduate Faculty elected new members of the General Committee as follows:

Professor M. S. Kendrick to complete the term of Professor Damon Boynton, Secretary of the Faculty, as representative at large.

Professor H. H. Williams to succeed Professor H. H. Dukes, as representative at large.

Professor L. P. Smith to succeed Professor M. S. Kendrick, as representative at large.

Professor W. T. Miller to succeed L. P. Smith, as representative of Group C.

Professor N. A. Tolles to substitute for Professor J. W. McConnell for the year 1950-51, as representative of Group J.

Professors Henry Guerlac, Group B, and B. F. Willcox, Group H, were re-elected.

I append statistical summaries.

CHARLES W. JONES  
Dean of the Graduate School

TABLE I. STATISTICS OF ATTENDANCE OF GRADUATE STUDENTS

A. TOTAL ENROLLMENT

Number of students registered during:	1950-51	1949-50
Fall Term .....	1488	1385
Spring Term .....	1422	1450
Number of students registered during the summer, as below . . .	1012	1118
Summer Session .....	463	568
Personal Direction .....	450	455
Candidate for Degree Only .....	99	95
Summer Term .....	0	0

B. GRADUATE STUDENTS CLASSIFIED ACCORDING TO THE DEGREES  
FOR WHICH THEY ARE CANDIDATES

	<i>Spring Term 1951</i>
Doctors of Philosophy .....	746
Doctors of the Science of Law .....	0
Doctors of Education .....	8
Masters' Degrees, as below	
Masters of Arts .....	130
Masters of Science .....	222
Masters of Science in Agriculture .....	39
Masters of Science in Education .....	40
Masters of Laws .....	0
Masters of Architecture .....	4
Masters of Fine Arts .....	4
Masters of Landscape Architecture .....	1
Masters of Chemical Engineering .....	4
Masters of Civil Engineering .....	14
Masters of Electrical Engineering .....	16
Masters of Mechanical Engineering .....	15
Masters of Science in Engineering .....	1
Masters of Education .....	17
Masters of Regional Planning .....	10
Masters of Engineering Physics .....	2
Masters of Science in Industrial and Labor Relations .....	33
Non-candidates, as below	
Non-candidates .....	55
Resident Doctors .....	5
Honorary Fellows .....	4
Candidates for Degree Only .....	52
Total .....	1422
Withdrawals .....	55

## PRESIDENT'S REPORT

TABLE II

GRADUATE STUDENTS RECEIVING DEGREES CLASSIFIED  
ACCORDING TO THE DEGREE RECEIVED

Masters' Degrees	1950-51	1949-50
Masters of Arts . . . . .	79	87
Masters of Science . . . . .	158	125
Masters of Science in Agriculture . . . . .	27	27
Masters of Education . . . . .	11	4
Masters of Science in Education . . . . .	35	44
Masters of Regional Planning . . . . .	5	2
Masters of Science in Engineering . . . . .	1	7
Masters of Laws . . . . .	0	0
Masters of Architecture . . . . .	1	5
Masters of Fine Arts . . . . .	4	4
Masters of Landscape Architecture . . . . .	2	0
Masters of Chemistry . . . . .	1	0
Masters of Chemical Engineering . . . . .	3	3
Masters of Civil Engineering . . . . .	12	12
Masters of Electrical Engineering . . . . .	19	12
Masters of Mechanical Engineering . . . . .	12	15
Masters of Science in Industrial and Labor Relations . . . . .	24	11
Total Masters' Degrees . . . . .	394	358
Doctors of Philosophy . . . . .	258	210
Doctors of the Science of Law . . . . .	0	0
Doctors of Education . . . . .	3	1
TOTAL . . . . .	655	569

TABLE III

## A. ADMISSIONS

	7/50-6/51	7/49-6/50
Number of applications distributed . . . . .	5572	6280
Number of applications considered . . . . .	2100	2432
Number of fellowship applications considered . . . . .	630	665

## B. NEW GRADUATE STUDENTS

	During Academic Year 1950-51	Summer 1950
Doctors' degrees . . . . .	173	18
A.M. and M.S. degrees . . . . .	229	31
Professional Masters' degrees . . . . .	143	38
Resident Doctors . . . . .	5	2
Honorary Fellows . . . . .	4	0
Non-candidates . . . . .	76	11
Total . . . . .	630	100
Withdrawals after registration . . . . .	21	0

## APPENDIX VII

## REPORT OF THE DIRECTOR OF THE UNIVERSITY LIBRARY

*To the President of the University:*

SIR: I have the honor to submit the annual report of the University Libraries for 1950-51.

The year just completed will be known in the annals of the University Library as the Year of Discovery, the year in which the long-lost diaries of Andrew D. White were found among a miscellany of duplicates, pamphlets, and personal papers in a grilled enclosure of the stacks. This daily record kept by the University's first President for over sixty years contains material of importance not only for the history of the University but also for the diplomatic history of the United States, as it records his activities and impressions while he served in various diplomatic posts, chiefly as minister to Russia and as ambassador to Germany. The wealth of material in these diaries can only be evaluated after careful study by competent scholars. In order to make such study possible at an early date, arrangements have been made for producing a typescript copy under the direction of a special Faculty committee. Satisfactory progress on this task can be reported, but it will be six months or a year before the task is completed. When the text is typed, the committee will study it and make appropriate recommendations regarding its publication. From preliminary examinations it seems probable that the diaries will eventually be published in a work which may be as significant as the White *Autobiography* and perhaps more candid in some of its disclosures.

The year was characterized also by further mutual efforts on the part of librarians, the Library Board, and administrative officers to develop a more cohesive library system. Such efforts fall far short of success, and yet even a little progress constitutes a worthwhile gain. The record that follows may serve to show that some progress has been made. To the extent that the information is available and within space limitations, this report attempts to present a picture of the library system as a whole, rather than of the University Library only.

In view of the reduction in funds available to most libraries in the endowed colleges, it might be expected that the record for the year would show some falling off in activity. This is true in some instances, although the reductions were offset in part by special gifts in certain areas, and here the record compares favorably with that of the previous year. In the libraries of the state-supported colleges, in general, similar reductions did not occur, with the result that the figures are somewhat stronger. For the system as a whole, the totals in most categories tend to be approximately the same as for the preceding year, with exceptions which will be noted later. This is a more satisfactory outcome than might have been predicted twelve months ago, and it is a tribute to the high morale and hard work of the libraries' staffs.

## USE OF THE LIBRARIES

The total recorded use of library materials was 522,852 volumes or items, representing a 5 per cent increase over the comparable figure for the preceding year. Since records of use are reported for the first time for several libraries, and the reporting from certain other libraries is more complete, it is doubtful that the increase can be considered significant. Library use is in part a factor of enrollment, and since the enrollment remained approximately the same, library use might be expected to follow the same pattern. The interlibrary loan records show 2,982 volumes loaned and 2,054 volumes borrowed from other libraries. The loans total about the same as last year; the borrowing is significantly larger, chiefly because of the inclusion of the Aeronautical Laboratory Library.

In assessing library use it must be emphasized that, in many of the libraries, it is not practicable or desirable to compile records, as the collections are arranged on open shelves, and the students have direct access to the books. This is especially true in most of the college and department libraries.

Instruction in the use of the library was again given to the freshman English classes, with special library problems assigned to certain sections selected by the English Department. A total of 97 sections with a registration of 1,900 students was given this basic introduction to the library. In addition, the reference librarian and several college and department librarians presented special library or bibliography lectures to selected classes at the invitation of the instructors. The results of these efforts are difficult to measure, but there appears to be good reason for believing that they are of benefit to the students. The reference librarians of the various libraries answered a total of approximately 25,000 reference questions, exclusive of directional questions. Bibliographical assistance to Faculty members was provided by the research librarian, and one bibliography on which he collaborated was published during the year.

During the spring vacation the south alcove of the main Reading Room in the University Library was converted into an open-shelf reserve room. Book-cases and card catalog cases serve as a partition. Entrance to the area is under the control of the Reserve Desk. Within the alcove books selected by the Faculty are grouped by courses of instruction, and students have direct access to them. This is a service which some Faculty members have wanted for a long time. By setting up this arrangement, it has been possible to supply it with very little expense for building readjustments and without any additional staff cost.

*Exhibits.* Through its exhibit program, the University Library endeavors to bring to the attention of the campus community a selection of the interesting and valuable works in its collections. A more attractive series of exhibits has been possible during a part of the past year because of the generosity of Mrs. Nicholas H. Noyes in providing the Library with twelve new exhibit cases of the latest type. The cases were initiated with the first major display of the Nicholas H. Noyes collection, centering around Lincoln and opening on February 12. This exhibit attracted more visitors to the Library than any exhibit of recent years, and both the collection and the new display facilities elicited much favorable comment. With Mrs. Noyes's assistance the Library published a brochure describing the Noyes Collection on the same day. The text of the booklet was written by Professor Henry A. Myers, and it was illustrated by reproductions from, and pictures of, items in the collection. The brochure itself is a piece of fine craftsmanship, having been produced under the direction of Cornell University Press by the Cayuga Press and the Meriden Gravure Company.

Among the other exhibits of the year the following may be noted: French humorists; studies in culture and applied science at Cornell; fifty books of the year 1950; 100 years of Harper's; history of insect illustration; first editions and manuscripts of Wordsworth and his contemporaries; a Cornell author—Vladimir Nabokov; works of Liberty Hyde Bailey; selection of old masters from Chapman Print Collection; and notable books of 1950.

The practice of reserving one exhibit case for timely small exhibits was continued. Included in this series were: Petrarch manuscript—Canzoniere; United Nations; Huzar's *The Purse and the Sword*; *Chinese Jade Carvings* by Nott; Nuremburg Chronicle; manuscript copy of Lincoln's Gettysburg Address; letters and papers of Ezra Cornell; White diaries; bookbinding by Mrs. C. H. Myers; and *Tripitaka*.

#### GROWTH OF THE LIBRARIES

During the year 44,420 items were added to the collections, and 2,706 were withdrawn or discarded for a net increase of 41,714. This figure is substantially smaller than the corresponding figure for 1949-50, in which accessions were



unusually large. The total holdings of all the libraries of the University are now 1,509,728, exclusive of single manuscripts.

Expenditures for books, periodicals, and binding totaled \$195,498.04, an increase of approximately \$14,500 over the preceding year. The increase is accounted for by several gifts, since book appropriations were generally slightly reduced. Of this total, approximately 65 per cent was expended by the Acquisition Department of the University Library for the development of the central collection and the college and department libraries it serves; 13 per cent was expended by the Agriculture Library; 8 per cent by the Law Library; and the remainder by the other libraries of the University. The Acquisition Department of the University Library continued to do the major part of the purchasing for the Industrial and Labor Relations Library and made some purchases for all libraries on the Ithaca campus.

*Book Funds.* The pressure of inflation on book and periodical funds is constantly increasing. The rise in prices of library materials is not so great as the rise in cost of living, but it is, nevertheless, very substantial. Studies of price increases of books and periodicals over the past two years show that the range of increase is from 10 per cent to 40 per cent. Individual publications have increased as much as 200 per cent. In an effort to offset these increases wherever possible, the Acquisition Department maintains a close surveillance of all discounts, and every effort is made to stretch the available dollars as far as possible. Comparisons with other university libraries show that we are buying as effectively as any other library of our size and that, in many instances, we are getting larger discounts. But there is a limit beyond which this kind of effort ceases to pay. At that point, larger book appropriations must be obtained, or the development of the book collections will suffer. This situation has been recognized by modest book fund increases, but these increases fall far short of the price advances on books and periodicals. Unless this situation can be remedied, the relative strength of our collections and our ability to meet the requirements of the University's teaching and research program will decline.

*New Fields of Instruction and Research.* As the University's program is broadened by the inclusion of new fields of study, the demands made on the libraries likewise are extended. All too frequently this occurs without the provision of additional funds for the strengthening of the book collection and of added staff for the increased service load. A current example is the program dealing with the history and culture of India. Some years ago, special funds in a modest amount were made available for materials on India. Funds from these sources are no longer available, and the Library's book appropriation has not been augmented to cover this field. Faculty members and students take the view that it is the Library's responsibility to provide the literature they need. This view can certainly be supported, but if it is not adopted by the budgetary authorities, and implemented with the necessary funds, the Library can only meet such new demands by curtailing purchases in other fields. This, for the most part, is not feasible, especially in a time of rising costs, when the normal requirements of all departments tend to increase in cost even though the scope remains the same.

The need of special funds for new fields of study has been recognized in developing the Southeast Asia program, and funds for book purchases, as well as for a part-time clerical assistant, have been transferred to the Library. In this instance it appears that the funds which can be allocated to the Library will be smaller than was anticipated, but they should make possible the acquisition of a basic collection in the field. If this collection is to be maintained and developed, additional funds will be required in the future.

The need for books and periodicals in new fields of study may not be as evident as the need for professors, classrooms, and laboratories, but it is just as real. This must be recognized at some point, or new programs cannot be successfully undertaken. If it were recognized at the outset, it would be helpful to all concerned.



*Major Acquisitions.* The chief collection purchased in the past year was the library of Colonel Frank Hull of Fortaleza, Brazil. The Library was enabled to make this purchase through the generous gift of Trustee Herbert F. Johnson. The Hull library is rich in early and rare books on the discovery, exploration, and history of Brazil and South America and includes, as well, a selected group of books in the field of English literature. The collection contains some 2,500 volumes.

The gift of the Napoleonic library of the late Claude G. Leland by his widow, Mrs. Mary T. Leland, added about 450 volumes to the historical collections of the Library. This collection is of special importance as it forms a significant adjunct to the French Revolution Collection presented by Andrew D. White. In addition to many standard works on Napoleon, the collection contains books from Napoleon's personal library and autograph letters and documents signed by Napoleon and his associates.

Through the generous support of Trustee Victor Emanuel several hundred rare books and manuscripts were added to the Wordsworth Collection. The buying program in this field has not only been greatly accelerated, but it has also been expanded to include first and early editions of the works of other figures in the English Romantic movement, in addition to Wordsworth and Coleridge. Improved arrangements for purchases at auctions in London have been made, and thus it has been possible to secure many items that otherwise might have been missed. Professor R. C. Bald also made extensive purchases for the collection during the summer of 1950 while traveling in England.

Late in the year the University Library purchased the personal library of the late Professor Albert B. Faust. This library of approximately 4,000 volumes includes a large collection of first and early editions of Charles Sealsfield, an Austrian novelist of the first half of the nineteenth century, and an important collection of books, periodicals, and pamphlets dealing with German-American relations. Both of these collections were developed by Professor Faust in connection with his own research in these fields. Included in the Faust purchase are the first three editions of the Sauer Bible, printed at Germantown, Pennsylvania, in 1743, 1763, and 1776, and Braght's *Der blutige Schauplatz*, printed at Ephrata, Pennsylvania, in 1748.

In addition to these collections the Library added many important individual works and sets of journals, among which the following may be noted:

#### I. *Monographs*

Beda Venerabilis. Opera omnia. 1st ed. Basel, 1563. 8 v.

Denkmäler des theaters . . . München, 1926-30. 12 v.

Fournier, Pierre Simon. Manuel typographique, utile aux gens de lettres . . . Paris, 1764-6. 2 v.

Handbuch der zoologie; eine naturgeschichte der stämme des tierreiches. Berlin, 1923-41. 7 v.

Lambert, Aylmer Bourke. A description of the genus pinus . . . London. 1803.

Luscinus, Ottmar. Musicae institutiones Othmari Nachtgall Argetini a nemine unqua prius pari facilitate tentate studiosis, . . . Strassburg, 1515.

Petrarch. Canzoniere. 15th-century manuscript.

Purcell, Henry. The works of Henry Purcell. London, 1878-1928. 26 v.

Sathas, C. Bibliotheca graeca medii aevi. Paris, 1872-6. 7 v.

Tripitaka. Taisho shinshu daizokyo. Ed. by J. Takakusus and K. Watanabe. Tokyo. 85 v., text, and 15 v., illus.

Vicq-d'Azyr, Felix. Traite d'anatomie et de physiologie. Tom. 1 & planches. Paris, 1786.

#### II. *Serials and periodicals*

Atti della Societa Ligure di storia patria. Genoa, v. 1-71, 1858-1948.

Bach jahrbuch. Leipzig. v. 1-36, 1904-1939.

Bataviaasch genootschap. Verhandeligen. Batavia, v. 1-78, 1779-1949.

Bollettino della societa geologica Italiana. Rome, v. 1-54, 1882-1935.

Geologiska foreningens. Fordandlingar. Stockholm, v. 1-71, 1872-date.

Isis von Oken. Jena. London, v. 1-41, 1817-1848.

The London gazette. London, No. 1-2000, 1665-1684.

Rivista di storia critica delle scienze mediche e naturali. Siena, v. 1—1910/11-date.

Tijdschrift voor muziekwetenschap. Amsterdam, v. 1—, 1882-date.

*Binding.* The binding situation, it is a pleasure to report, has been steadily improving. One of the two local binderies has installed new equipment and improved its techniques to the point where it is now certified as a Class A bindery by the American Library Association. The quality of the binding compares favorably with that of standard library binders; the service is excellent (normal delivery time is two weeks); and the price, although it has increased in the past year, is still below the average of library binders operating in this area. This is a fortunate development for the libraries. Most of the standard binding for the libraries in Ithaca is now being done by this firm.

It is hoped that increased funds for binding can be provided in the near future to enable the libraries to rebind and repair the many volumes on the shelves which are seriously in need of attention. The present local binding situation offers an excellent opportunity to put the collections in good physical condition at moderate cost.

In another aspect of its binding requirements, the University Library is also extremely fortunate, in that the repairing and rebinding of its rare books is now being provided by Mrs. C. H. Myers without charge. Mrs. Myers studied this type of binding in England and France, working with master craftsmen, and she is now putting her skill at the service of the Library. Because of the cost of this highly skilled work and of the materials used, it has not been possible to maintain and to restore the bindings of many valuable works which require attention. Under the present arrangement, however, many of our rare volumes are now being given proper care.

#### CATALOGING

The record of cataloging in all the libraries that report on this activity shows a total of 29,776 new titles cataloged, and 10,247 titles reclassified and recataloged, for an over-all total of 40,023 titles. There is no comparable figure for the preceding year, since the records are not available, but it seems safe to say that the production was about the same. Approximately 65 per cent of all cataloging is done by the Catalog Department of the University Library, and the production of this department was smaller than that for 1949-50 by only 400 titles. It is regrettable that even a small decrease must be reported, but in view of the fact that the staff was reduced, some loss in output was unavoidable.

Production of catalog cards amounted to 215,124. Again no comparable figure is available, but the Card Section in the University Library prepared 138,217 cards this year, as compared with 160,610 cards a year ago. Since the section produces approximately 63 per cent of the total, it seems probable that the over-all production has decreased.

In general, the cataloging, so far as information is available, has been kept reasonably well up to date, and there are no current accumulations of material awaiting cataloging. There are, however, some older groups of material in the University Library which are still uncataloged. Whenever possible, selected older material is processed, but the clearance of this arrearage will not be possible without additional staff.

Substantial reclassification projects have been carried on by the Agriculture, Veterinary, and University Libraries. In Agriculture, the major effort has been directed toward the reclassification and recataloging of selected groups of material; in Veterinary, the reclassification and recataloging of the entire collection is well under way; in the University Library, selective reclassification and recataloging along lines already established have been continued. It should perhaps be pointed out that the reclassification and recataloging which are necessary for satisfactory use of the main collection cannot be undertaken

until a special staff is provided for the task. This need has been repeatedly noted, but to date it has not been possible to secure the necessary funds.

Renewed efforts have been made during the past year to develop uniform cataloging policies and procedures with the objective of ensuring the most economical operation possible and at the same time the production of card catalogs which will be of standard quality and form. To this end steps have been taken to provide for the regular exchange of information on cataloging problems and for the discussion of cataloging policies and procedures by the staff members directly concerned. Instruction of new staff members and assistance in dealing with cataloging problems are provided by the University Library for the catalogers in the college libraries, as there may be requests for such assistance. The union catalog in the University Library is being steadily developed, and it is a matter of regret that the Law Library is not yet in a position to supply catalog cards for its monographic holdings. The failure to include these materials in the union catalog is at times the cause of serious inconvenience to Faculty members and advanced students, particularly to those working in the fields of business and government. The desirability of making the union catalog complete for all campus libraries does not seem open to question, and it is hoped that the means for closing the present gap may be provided at an early date.

#### SPECIAL COLLECTIONS

*University Archives.* The discovery of the diaries of Andrew D. White stimulated interest in the Library's manuscript collections and in the uncollected and unorganized groups of papers of historical value on the campus. As one result of this interest, the University, on recommendation of the Faculty, is establishing a University Archives as a co-equal unit with Regional History, with the curator of Regional History designated also as University archivist. The archivist, aided by an assistant archivist and part-time clerical assistants, will have the responsibility for collecting, organizing and preparing for use the official noncurrent records of the University and historical materials relating to Cornell, its development, Faculty, students and alumni. The Archives will share quarters with Regional History.

In the development of the University Archives the archivist and the director of the library will have the advice and assistance of a council composed of representatives of the administration, the Faculty, and the alumni. Members of the council are to be appointed by the chairman of the Library Board and the council will report to the board.

The organization of the University Archives as an integral part of the Library and as a division having equal status with Regional History and operating under a single officer appears especially desirable at Cornell. Both the University Library and Regional History have been performing some of the functions of a university archives, yet neither has had authorization or staff to perform the service satisfactorily. Under the pattern now being established the existing collections will be brought together administratively, will be served by a single staff, and will be accessible through a single set of records. The collections cannot be physically consolidated until a new or expanded central library provides the space that the department requires.

*Rare Book and Manuscript Department.* Even more directly attributable to the White diaries find is the new Rare Book and Manuscript Department which is being set up in a portion of the stacks of the University Library and which is made possible through the generosity of an anonymous alumnus. The opportunity to establish this department with an experienced rare-book librarian in charge and with adequate clerical assistance marks a distinct forward step in the Library's program. It means that for the first time it will be possible to bring together the rare books and manuscripts of the Library into a unit in which they can be given the special treatment which, by their nature, they require. The care and servicing of these materials will be in the hands of a staff which has a special competence in this area. The department will fill a

long-standing need of the University and will provide a type and standard of service which it has not been possible to achieve in the past.

The quarters in which the department will be located consist of the three lower floors of the southwest stack. The two floors below grade level will be air-conditioned. The floor at grade level will be protected with security devices; a portion of it will be developed as an office and work area; and the carrells will be used by readers. There will be no rare book reading room as there is no space available. The building improvements and adjustments are being provided through the generosity of Trustee Victor Emanuel.

*Regional History Collection.* The development and services of the Regional History Collection will be described in a separately printed report to be issued later in the year. It may be noted here, however, that there has been significant growth of the collection and increased use of its holdings during the past year. The entire collection was inventoried, and the corrected count of its contents is 4,208,723 manuscript items. Over 400,000 items were added during the past year. An acquisition of particular importance was a group of 53 letters of George C. Eggleston, the "Hoosier Schoolmaster." Regional History is now the chief depository for Eggleston manuscripts and letters.

*Other Special Collections.* The year's development of the Wordsworth Collection has been noted elsewhere. The scope of the Wason Collection has been expanded through funds made available by the Southeast Asia program and now covers China, Southeast Asia, the Philippines, the islands of the southwest Pacific, and Indonesia. *The Far Eastern Bibliography 1949* compiled by the curator of the Wason Collection was published in August, 1950; the volume for 1950 is now in press.

The Icelandic Collection was used intensively by several visiting scholars and more casually by several Cornell students. The publication of *Islandica* was continued by the issuance late in the year of Volume XXXV, *The Saga of Hrafn Sveinbjarnarson*, in an English translation, with introduction and notes by Dr. Anne Tjomsland, a Cornell alumna. *The Saga of Hrafn*, aside from its high literary quality and general historical accuracy, is of special interest because of its account of medical treatment in the Middle Ages.

#### COLLEGE LIBRARIES

*Agriculture-Home Economics.* In anticipation of occupying the new library building in 1952, the librarians of the Agriculture and Home Economics Libraries have given much time to the study and selection of equipment and to the coordination of records and procedures. With the careful preparation that is being made for fusing the two libraries into a single operation, there is every reason to expect that the transition should be accomplished with a minimum of difficulty. Once the new Albert R. Mann Library is functioning, the Faculty and students of the two colleges will be provided with excellent library facilities and services.

This library constitutes a significant addition to the library system of the University and should help to raise the standards of library service on the campus.

*Hotel Administration.* The Hotel Administration Library, housed in very attractive quarters in Statler Hall, provides reference and study facilities for the students of the School. Library service for the School was formerly provided by the Home Economics Library, but, with occupancy of the new building, it appeared desirable to establish a special library.

*School of Nursing.* The Library of the School of Nursing, located in the New York Hospital, is a professional library, which, together with the facilities of the Medical College Library, provides the library service required by the Faculty, students, and other qualified readers.

#### LIBRARY STAFF

Earlier reports have noted the continuing efforts of staff of the various libraries to develop a strong spirit of teamwork and a systematic and thoroughgoing coop-

erative approach to the problems and the opportunities which the Cornell libraries present. In the past year, this development has been carried further through a series of fortnightly meetings of the librarians of the major college libraries with the administrative officers of the University Library, and through irregular, but fairly frequent, meetings of staff members performing similar functions in the different libraries. The objective has been to consider common problems, to explore possible solutions, and, if possible, to develop uniform procedures. There have been several tangible results of these meetings: a uniform vacation policy for professional librarians has been adopted; a new and more complete monthly report form has been put into use; and the professional library positions on the campus are to be surveyed and classified. Many other problems have been discussed and minor adjustments made as a result of the exchange of information.

Two of the items noted above may prove to be of real significance for the future development of the libraries. If the reporting on all the libraries can be made more complete, as now seems possible, the compilations of data drawn from these individual library reports will provide a more comprehensive and detailed picture of the library operations of the University than has been available in the past.

The need for a classification of library positions was pointed out in the *Survey of 1947-48* and has been noticed in several of these reports. For various reasons, it has not been possible to initiate a classification study until the present time. The inclusion of the clerical and subprofessional positions of the University Library and of the department and college libraries of the endowed colleges in the general classification of clerical and other nonacademic personnel undertaken by the University Personnel Office presented the occasion for opening up the question of the classification of professional positions. After agreement by the college librarians and with the approval of the deans of the state-supported colleges, arrangements were made with the classification officer to classify all professional library positions. This work is now in progress and will be completed early in the fall. The resulting classification will be put into effect in the endowed colleges at the earliest practicable date. It is not yet determined whether this classification will have any direct application in the libraries of the state-supported colleges. Even though it remains a paper classification for these libraries, it is believed that it will be of value as a guide and as a blueprint of all professional library positions on the campus.

The Staff Association has continued its program of professional and social meetings throughout the year. Its most successful professional activity consisted of a series of six lectures on rare books by Assistant Director Reichmann during the winter and spring. The lectures were given once a week in the evening, and the series was repeated four times, with a total registration of 40. The rare-book collection of the University Library provided the laboratory materials for these lectures. The association is now considering the sponsorship of a series of book discussion groups during the coming year.

#### LIBRARY PROBLEMS

*Library Building.* In the report written a year ago it was observed that progress had apparently been made toward the solution of the University's central library building problem as a result of the studies of the *ad hoc* committee and the approval of the committee's report by the Planning and Development Committee of the Board of Trustees. Unfortunately, it must now be reported that there has been no progress in the past year. Presumably this is to be ascribed to changes in administration that have delayed the program, which, it was understood a year ago, would be undertaken.

Regardless of the explanation for the delay, the hard facts are that a year has been lost and that the inadequacy of the present building becomes more pronounced each day. This inadequacy is not an abstract matter; it is a very real and costly deprivation to Cornell students and Faculty members who are being forced to work against handicaps and without the kind of library services



and facilities which are provided as a matter of course in other institutions of Cornell's standing.

It is evident to anyone who examines the situation that Cornell needs a new or greatly expanded central library building. This is fundamental and inescapable. Until such a building is provided, there will be no solution of Cornell's library problems which is more than makeshift.

*Stack Space.* The need of additional shelving for books cannot await the construction of a new building. The two storage areas made available to the University Library within the past five years are nearly full, and in certain sections of the stacks books are now being shelved on the floor. Immediate relief is essential. A survey of the stacks shows that additional shelving for approximately 40,000 volumes can be installed along the walls and in alcoves, and it is to be hoped that this increase in shelf space can be provided without delay.

Several college and department libraries, particularly Architecture and Veterinary, are equally hard pressed for shelf space, and relief must be found in the course of the year.

*Improvements—University Library.* In keeping with the requirements of the insurance program, the stacks and several of the staff workrooms of the University Library have been rewired and relighted. The result is most satisfactory, but it also serves to emphasize again the need for new lighting in the reading room. This room and its adjoining alcoves is the most heavily used room in the building. During the major part of the regular college terms, artificial light must be used at all times. The illumination now provided falls far short of minimum standards and is the source of frequent complaints on the part of students.

As noted in previous reports, the chairs are worn out and should be replaced.

*Organization of Libraries.* The administrative organization of the libraries has been clarified and unified to some extent in recent years. There are still problems in this area, however, and there are questions which remain unanswered. The development of the State University of New York may interpose some new factors into a situation which is already complex. It is not possible now to project the lines of future development, especially since library collections and services are of such a nature that they tend to overlap and intermingle regardless of administrative and jurisdictional lines.

Late in the year an administrative board for the Albert R. Mann Library, the new library of Agriculture and Home Economics, was created by the Board of Trustees. The membership of the board consists of the President or provost, the deans of the colleges, the director of finance, and the director of the University Library.

*Serial Catalog.* Two years ago work was begun on a special catalog in which the record of the serial holdings of the University Library and the college and department libraries administered by it were entered. Good progress in this work has been made, and the catalog should be completed in another year. Thereafter it will require much less effort to maintain it as a current record.

Within the past year, cards reporting the serial holdings of the Industrial and Labor Relations Library have been added. It is expected that this practice will be continued until the serials in this library are fully incorporated. Beyond this, there are at present no plans for expanding the catalog to include the serial holdings of the libraries of the other state-supported colleges or the Law School. It would be highly desirable to include the holdings of these libraries and thus have in one catalog a record of all serials on the campus.

The last report noted a series of problems confronting the libraries. Several of these problems, at least in part, are in process of solution. Most of them, however, remain ahead of us. It is to be hoped that means for solving them can be found in the coming year.

#### GIFTS

Earlier sections of this report have indicated the Library's indebtedness to some of its friends for generous support during the past year. In addition to



expressing our warm thanks for these gifts, the Library takes this opportunity to acknowledge with gratitude the many other gifts it has received from interested alumni, Faculty members, students, and friends. These gifts, frequently, have made it possible for the Library to add to its collections important and useful materials, which could not otherwise have been provided.

Individual acknowledgement of a selected group of gifts is made in the paragraphs that follow; a complete list of donors is attached to the separately printed report of the libraries.

Mrs. Nicholas H. Noyes presented a group of books, autographs, manuscripts, and letters, comprising, with the manuscript copy of the Gettysburg Address, the Noyes Collection of American Historical Documents. This collection adds to the Library's holdings many important items of great historical interest which are much sought after by collectors.

Mrs. C. H. Myers made the University Library a gift of the rare-book bindery and its equipment, which is now established for the sake of convenience in her home. In addition, Mrs. Myers is providing a rebinding and repair service for rare books at no expense to the Library.

In the fall of 1950, the friends of Emeritus Professor James E. Rice presented to the University funds totaling approximately \$25,000 for the establishment and development of the James E. Rice Memorial Poultry Library. This library will be housed in the Albert R. Mann Library and will be administered by the librarian of the Agriculture Library under the supervision of the director of the University Library and the Library Board. A special advisory committee will be appointed to assist in the formation of policies governing the development of this library.

Gifts of funds for the purchase of books were received from Dr. Walter MacKellar, Dr. Austin Evans, Mrs. Louise F. Peirce, John S. Fair, and Robert Bases.

From Sidney W. Lockhart the Library received three holograph letters of Willard Fiske; from LeVan M. Burt, a collection of historical pictures of the University; from Misses Lola and Jessica Bruce, a Russian bronze urn formerly in the U.S. Embassy, Berlin, during Andrew D. White's ambassadorship; and from Hannibal C. Ford, a nine-volume Ford genealogy.

Mrs. Georg Vetlesen presented the luxurious three-volume set, *Chinese Jade Carvings*, in which her collection is described.

Dr. C. P. Oberndorf made substantial additions to the Oberndorf Fund for books in the field of psychiatry.

Many gifts of books, pamphlets, and periodicals were received from members of the Faculty. Among them the following may be noted: from Morris Bishop, 26 volumes of French literature; from David Daiches, 24 volumes of English and American literary works; from George H. Sabine, 119 volumes on miscellaneous subjects, chiefly philosophy and political science; from A. H. Wright, 15 volumes of books and periodicals on scientific subjects and local history; from Walter F. Willcox, a collection of books, reports, and papers on statistics; from A. M. Drummond the 12-volume set, *Denkmäler des Theatres*, as well as his recently published *More Upstate New York Plays*; from Victor Lange, 14 volumes of German literature; and from Walter H. French, 10 volumes of English and American Literature.

From Dr. Edmund Ezra Day and from Dr. Day's estate, the Library received 140 miscellaneous volumes.

Nellis M. Crouse presented 10 volumes of books and periodicals on historical subjects.

Copies of all its new publications were received from Cornell University Press, and 135 volumes of books and periodicals on philosophy and religion from *The Philosophical Review*.

The Cornell Library Associates, with a membership of 104, made the following gifts:

Laborde, A. de. *La Bible moralisée conservée à Oxford, Paris et Londres; reproduction integrale du manuscrit. Paris, 1911-27. 5 v.*

Seven publications of: *Société française de reproductions de manuscrits à peintures. Paris, 1923-47. 9 v.*

Vienna, Nationalbibliothek. . . . Die illuminierten handschriften und inkunabeln der national bibliothek in Wien. . . . Leipzig, 1923-38. 7 v. in 15.

Weems, Mason Locke. Mason Locke Weems, his works and ways. New York, 1929. 3 v.

Through the courtesy of H. A. Stevenson, editor of the *Alumni News*, the regular monthly column on the Library appeared in alternate issues of the *News*. The assistance of Faculty members and the library staff in preparing these columns is gratefully acknowledged. The generous assistance of Professor George H. Healey in writing the story on the Andrew D. White diaries was especially noteworthy, as the results of the announcement show.

To all these donors and to the many others who have contributed during the past year, the Library expresses its deep appreciation.

## STATISTICAL TABLES

The first statistical table given below relates to the activities of the University Library only. It is included in this report because it gives fairly complete data on many of the University Library's activities over a five-year period. If present plans can be carried out in the next year and more detailed reports are obtained from all the libraries, this particular table will perhaps not be published in the future.

The group of tables arranged under II—Cornell Libraries report as fully as available data permit the activities of all of the libraries of the University. The tables on reference service and cataloging are published for the first time; the table on circulation is more complete than it has been in the past.

## I—UNIVERSITY LIBRARY

<i>Cataloging and Classification</i>	1950-51	1949-50	1948-49	1947-48	1946-47
New Volumes and pamphlets					
cataloged . . . . .	32,865	32,365	29,529	27,486	17,291
New titles . . . . .	19,929	21,512	16,880	15,072	10,129
Volumes added to cards . . . . .	2,099	2,149	6,621	8,796	6,864
New editions . . . . .	135	278	298	225	...
Added copies . . . . .	759	683	994	1,361	...
Maps cataloged . . . . .	199	121	11	9,157	5,131
Manuscripts . . . . .	29	36	27	13	15
Volumes reclassified and					
recataloged . . . . .	11,727	12,901	15,452	2,358	393
Serial volumes recataloged . . . . .	52,453	39,040	...	...	...
Titles reclassified and recataloged	6,187	4,998	4,559	568	...
Microreproduction (titles) . . . . .	29 on 60	29 on 40	32 on 164	38 on 96	33 on 73
	reels	reels	reels	reels	reels
Cards filed . . . . .	160,128	180,000	126,852	79,080	...
Card Production:					
L. C. cards completed . . . . .	59,398	69,903	60,992	50,504	20,245
Multilithed cards completed . . . . .	52,735	64,993	23,175	4,020	...
Typed cards . . . . .	26,184	25,714	26,163	27,311	18,624
Stencils . . . . .	12,130	12,179	5,108	887	...
Multilithed cards run . . . . .	93,392	96,904	30,951	...	...
Cards added to . . . . .	2,320	2,511	2,687	7,455	8,414
Cards corrected . . . . .	7,328	8,422	11,682	7,273	3,548
<i>Periodicals and Binding</i>					
Periodicals currently received:					
By subscription . . . . .	2,533	2,352	2,029	1,539	1,310
By gift and exchange . . . . .	935	984	1,039	1,465	1,420
Newspapers currently received . . . . .	61	58	63	35	...
TOTAL . . . . .	3,529	3,394	3,131	3,039	2,730

## PRESIDENT'S REPORT

## I—UNIVERSITY LIBRARY, continued

	1950-51	1949-50	1948-49	1947-48	1946-47
<i>Periodicals and Binding (Cont.)</i>					
Binding:					
Volumes of serials bound . . . . .	5,962	5,992	5,705	4,857	3,235
Volumes repaired . . . . .	1,762	1,440	858	1,165	996
Books bound . . . . .	5,110	5,042	2,396	3,027	1,705
TOTAL . . . . .	12,834	12,474	8,959	9,047	6,329
<i>Circulation</i>					
Regular:					
Home use (7-day 8,658) . . . . .	90,243	93,447	86,424	83,803	75,019
Reading Room . . . . .	24,179	24,634	25,231	19,951	37,994
Stall and seminar . . . . .	6,961	7,346	7,693	6,439	8,875
TOTAL . . . . .	121,383	125,427	119,348	110,193	121,888
Reserve					
Reading Room (McGraw, 24,275) . . . . .	103,073	104,027	107,308	118,540	105,008
Overnight (McGraw, 1,776) . . . . .	8,640	8,798	12,304	8,999	...
TOTAL . . . . .	111,713	112,825	119,612	127,539	105,008
<i>Reference</i>					
Interlibrary loans:					
Titles loaned . . . . .	1,824	...	...	...	...
Volumes loaned . . . . .	1,995	1,865	1,520	1,292	1,260
Photostats supplied . . . . .	83	...	...	...	...
Microfilms supplied . . . . .	61	...	...	...	...
Titles borrowed . . . . .	496	...	...	...	...
Volumes borrowed . . . . .	573	627	574	551	604
Photostats received . . . . .	26	...	...	...	...
Microfilms received . . . . .	33	...	...	...	...
Reference questions . . . . .	9,751	9,003	8,754	9,427	...

## II—CORNELL LIBRARIES

TABLE 1. GROWTH OF THE LIBRARIES.

	<i>Items Added</i>	<i>Items Withdrawn</i>	<i>Present Extent</i>
General Library *	24,061	599	905,889
Wason Collection	1,470	...	66,282
Flower Veterinary Library	433	20	16,995
Comstock Memorial Library	61	...	4,693
College of Architecture Library	310	3	8,243
Zoology Library	384	28	7,981
Barnes Hall Library (Religion)	164	...	5,161
Willard Straight Browsing Collection	90	19	2,291
Icelandic Collection	157	...	23,536
Dante Collection	20	...	11,068
Petrarch Collection	...	...	4,651
Manuscripts	21	...	1,174
Maps	1,241	...	30,665
Other separately recorded collections	55	113	4,480
TOTAL (including maps and MSS)	28,467	742	1,093,109
Law Library	2,150	613	116,824
New York State College of Agriculture Library and departments	4,962	1,007	171,473
New York State College of Home Economics Library	1,338	93	20,204
Hotel Administration Library	318	5	1,513†
New York State Veterinary College Library	675	3	5,635
New York State School of Industrial and Labor Relations Library	4,441	51	27,296
New York State Agricultural Experiment Station Library (Geneva)	515	...	24,157
Cornell Medical College Library	767	...	41,479
Cornell Aeronautical Laboratory Library	542	...	5,139
Cornell University-New York Hospital School of Nursing	245	192	2,899†
TOTAL	15,953	1,964	416,619
TOTAL, ALL LIBRARIES	44,420	2,706	1,509,728
Regional History Collections (chiefly single manuscripts)	416,343	...	4,208,723‡

\* Includes department and college libraries administered by the University Library.

† Included for the first time.

‡ Actual count.

TABLE 2. CIRCULATION.\*

Libraries				Interlibrary Loans †							
	General	Reserve	Reserve Over- night	Sent				Received			
				Titles	Photo- Vols.	Micro- stats	Micro- film	Titles	Photo- Vols.	Micro- stats	Micro- film
University libraries . . .	121,383	103,073	8,640	1,824	1,995	83	61	496	573	26	33
Department libraries †	20,761	9,302	2,955	..	..	..	..	..	..	..	..
Architecture . . . . .	4,344	..	1,448	2	3	..	..	..	..	..	..
Business . . . . .	1,048	10,243	626	..	..	..	..	..	..	..	..
Engineering . . . . .	6,671	2,254	633	..	..	..	..	15§	24§	..	..
Agriculture and depts. . .	26,225	24,227	2,344	471	494	35	2	323	348	59	15
Home Economics . . . .	16,615	68,264	7,434	43	43	..	..	57	57	..	..
Hotel Administration . .	973	..	605	2	2	..	..	..	..	..	..
Industrial and Labor Relations . . . . .	19,927	26,068	4,048	46	46	..	..	92	98	..	..
Veterinary . . . . .	4,097	..	..	69	69	..	..	33	33	..	..
Geneva Experiment Station . . . . .	..	..	..	10	10	..	..	153	153	8	2
Medical College . . . .	10,831	..	..	231	231	5	..	51	51	..	..
Aeronautical Laboratory .	..	..	..	86	86	..	..	769	769	..	..
School of Nursing . . . .	9,000	..	3,300	3	3	..	..	5	5	..	..
TOTAL . . . . .	241,875	243,431	32,033	2,787	2,982	123	63	1,994	2,111	93	50
TOTAL RECORDED USE IN ALL LIBRARIES . . . . .	522,966										

\* Law Library not included as it keeps no circulation statistics.

† Department and College Libraries administered by CUL included under University Library figures.

§ Incomplete because of lack of records in some department libraries.

|| In addition to figures included in University libraries.

|| Includes reserve and nonreserve circulation.

TABLE 3. REFERENCE SERVICE.

	General Questions	Search Questions	Bibliographies Compiled
University Library . . . . .	9,421	460	..
Department libraries . . . . .	3,398	79	9
Regional History . . . . .	540	592	..
Architecture . . . . .	361	111	27
Business . . . . .	487	90	3
Engineering . . . . .	700	5	0
Agriculture and depts. . . . .	5,554	73	14
Home Economics . . . . .	1,718	62	7
Hotel Administration . . . . .	1,104	24	16
Industrial and Labor Relations . . . . .	1,652	327	30
Veterinary . . . . .	1,139	152	92
Aeronautical Laboratory . . . . .	..	292	161 *
School of Nursing . . . . .	400	..	..
Total . . . . .	26,474	2,267	198 †
TOTAL REFERENCE SERVICE . . . . .	28,939		

\* Hours.

† Aeronautical Laboratory not included.

TABLE 4. CATALOGING.\*

	<i>New Titles</i>	<i>New Volumes</i>	<i>Maps</i>	<i>MSS</i>	<i>Micro- repro- duction</i>	<i>Titles Reclass- ified &amp; Recat- aloged</i>	<i>Volumes Reclass- ified &amp; Recat- aloged</i>	<i>L. C. Cards</i>	<i>Typed Cards</i>	<i>Multi- lithed Cards</i>
University Library †...	19,929	32,865	199	29	29 on 60 reels	6,187	11,727	59,398	26,184	52,735
Department libraries...	98	121	...	..	...	3	3	...	725	...
Architecture.....	201	...	30	..	...	110	...	...	...	...
Agriculture and depts...	3,806	7,419	0	0	0	745	4,000	23,925	10,232	0
Home Economics §										
Hotel Administration	589	...	...	..	...	...	...	...	589	...
Industrial and Labor										
Relations.....	2,209	5,186	0	0	0	...	...	13,469	5,863	...
Veterinary.....	1,274	...	...	..	...	2,602	...	3,949	13,055	...
Medical College.....	700	...	...	..	...	600	...	...	2,000	...
School of Nursing.....	970	1,145	...	..	...	600	600	...	3,000	...
TOTAL.....	29,776	46,736	229	29	29 on 60 reels	10,247	16,330	100,741	61,648	52,735

\* Aeronautical Laboratory, Geneva Experiment Station, and Law Libraries not included as they supplied no cataloging statistics.

† Includes department and college Libraries administered by University Library.

‡ Included in University Library figures.

§ Included in Agriculture and department figures.

TABLE 5. LIBRARY EXPENDITURES.

	<i>Salaries</i>	<i>Wages</i>	<i>Books, Periodicals, Binding</i>	<i>Miscellaneous</i>
University Library.....	\$157,652.83	\$19,818.96*	\$113,340.54	\$ 21,794.72
Department libraries.....	10,645.00	3,356.61	.....†	.....†
Collection of Regional History	7,334.60	698.38	.....	2,013.59
Architecture.....	5,050.00	337.36	1,753.19	557.81
Business.....	3,200.00	.....	3,408.21	.....†
Engineering.....	6,260.00	1,471.61	2,161.43	.....†
Law.....	15,020.00	.....	15,319.01	721.93
Agriculture and depts.....	66,833.00	1,552.00	24,907.00	5,126.00
Home Economics.....	20,329.67	1,021.67	4,672.96	545.63
Hotel Administration.....	3,000.00	286.82	1,264.00	1,070.66
Industrial and Labor Relations	47,726.10	4,673.62	13,842.29	2,196.10
Veterinary.....	13,877.00	189.15	2,803.29	2,216.54
Geneva Experiment Station..	3,685.00	.....	4,377.12	117.64
Medical College.....	7,480.00‡	.....	6,250.00‡	.....
Aeronautical Laboratory.....	.....	.....	.....	.....
School of Nursing.....	.....	.....	1,400.00	236.46
TOTAL.....	\$368,093.20	\$33,397.18	\$195,499.04	\$ 36,597.08
TOTAL EXPENDITURES FOR LIBRARY PURPOSES.....				\$633,586.50

\* Includes Business Library.

† Included in University Library figures.

‡ Not complete.



## CONCLUSION

It is a pleasure to conclude this report by acknowledging the unfailing support and assistance of the librarians and staffs of all the libraries and of the Library Board. It goes without saying that the year's record could not have been as good as it is without this assistance.

I should like to take special note of the sympathetic understanding and assistance of Acting President T. P. Wright in meeting the problems that confronted the Library during the past year and in laying the groundwork for a stronger program in 1951-52.

At the beginning of your administration, I wish to assure you of the loyal support of the staff of the University libraries and of the determination of the staff to give the Cornell community the highest quality of library service within its powers. With your support, I am confident that even our most difficult problems can be met and solved.

STEPHEN A. MCCARTHY  
Director

## APPENDIX VIII

# REPORT OF THE DEAN OF THE COLLEGE OF ARTS AND SCIENCES

## *To the President of the University:*

SIR: I have the honor to submit my report as Dean of the College of Arts and Sciences for the academic year 1950-51.

Notwithstanding the fact that we have been operating under a reduced budget this year, that we had to anticipate a further shrinkage of 5 per cent in the total budget in order to provide very modest salary increases for the following year, and that the military situation for most of this year has rendered uncertain the stability both of staff and student body for next year, the amount and the quality of instruction, scholarship, and research have continued without serious impairment, though the pinch has been severe at times and it is evident that in most instances the places in which we have cut cannot long remain unreplenished. The details of the record of our work will be found in the departmental reports sent you for your perusal. This report can only touch on selected points and make references to illustrative instances where appropriate.

## REPORT ON YEAR'S WORK

*General.* In 1950-51, the schools and colleges of the University\* gave 271,707 student hours of instruction. The College of Arts and Sciences provided 44 per cent of this instruction at the undergraduate level, or 119,733 hours. Of the graduate hours of instruction given at Ithaca, the College provided 36 per cent (8,547 hours) of the total of 23,725 hours. Of all the undergraduate hours taught by the College, 59 per cent went to undergraduates enrolled in the College. The distribution of undergraduate hours by divisions of the College was as follows: Social Sciences, including History, 30 per cent; Natural Sciences and Mathematics, 37 per cent; and Humanities, 33 per cent.

In my last year's report I suggested that although this College has a major share in the instruction of all undergraduates in the University, it may be doubted that the students from the other divisions are getting anything ap-

\* Not including the Medical School in New York City or graduate instruction at Ithaca.

proaching a good basic general education. I indicated then, and repeat now, that this is a problem for serious and persistent study and remedial effort. In the same report, I pointed to the need for the Faculty of the College to clarify the objectives we have for the instruction of our own students and give consideration to our curriculum and requirements and teaching methods in view of these objectives. The time and effort I have been able to devote to initiating and promoting systematic consideration of these problems has not been commensurate with the importance of the issue. However, some discussion has occurred in the Educational Policy Committee from time to time incident to our consideration of the problems of the relations among the literature departments and of the work of the classics department. I have also undertaken a number of informal discussions with various members of the staff. Most important, and most rewarding of all, I was fortunate in finding eight of our younger staff members interested in the problem of general education, who were willing to devote an evening a week for most of the spring term to discuss this problem in an informal seminar. They were given the widest freedom and latitude and were deliberately given no official status, such as a subcommittee of the Educational Policy Committee, in order to maintain the atmosphere of a free and informal seminar. They took this assignment very seriously, and, although they came from all of the major divisions of the College and had sharp differences of opinion to resolve, they achieved a remarkable degree of agreement.

The record of their conclusions has no status as an official report or recommendation for action. However, as a basis for further informal discussion out of which official recommendations may emerge from the properly authorized committees of the College, it will, I am sure, prove extremely valuable. I intend to submit that record to staff members in the various divisions with a suggestion that they might use it as a point of departure for further discussions. On the basis of whatever consensus can be achieved in the informal discussions, we can then consider whether or not there are appropriate revisions to make of our instructional content and procedure and of our requirements for the A.B. degree. At such a point, we shall then be in a better position than we are now to consider the general educational needs of students from the other divisions of the University.

Closely related to instruction is the function of advice and guidance for the student throughout his academic career. Fifty-seven members of the College staff served as special advisers to freshmen and sophomores, and nearly all of the remaining members of the staff advise upper-class majors and graduate students. To be effective, the work of advising and counseling should be coordinated and supplemented by a substantial portion of the time of at least two persons in my office. Because of retrenchment in the budget, we had to let Professor Burfoot go back to his own department this year, leaving Mr. Perry to handle all of this work and in addition help with the promotional work among the high schools and with the admissions work as well. In consequence, the important advising work of the College has had to suffer markedly, and it is hoped this deficiency can be remedied in the near future.

In addition to the above-mentioned problems of a general nature which have concerned me, your attention is called to certain phases of the work and some of the problems of the main subject matter divisions of the College. The details of the record of work done and the specification of self-needs may be found in the departmental reports.

#### THE PHYSICAL SCIENCES

Although the hardest hit in the budget cuts of the current year, the departments in this division of the College have contrived by means of new and renewed research contracts and grants, by tapping reserve accumulations of special endowments, and by special relief appropriations by the University, to continue a vigorous program of instruction and research. All of the physical science departments have made substantial efforts, which were accompanied

by at least moderate success, to improve the quality of both undergraduate and graduate instruction in spite of reduced man power. In order to increase the effectiveness of their instruction for the superior undergraduate majors, both chemistry and physics are developing special honors programs somewhat similar to the honors program conducted by the English Department.

In connection with instruction in the sciences, it is becoming clearer that instruction in the earth sciences is suffering for lack of work in geomorphology and in geography. Strengthening of the staff in this field is urged as soon as possible.

Progress in research in physics is especially gratifying. The problems which hampered work on the synchrotron have largely been solved, and this equipment now readily exceeds its designed 300,000,000 electron volts in energy. Much of the time it is in operation around the clock, and an impressive list of significant experiments in high-energy processes is resulting from its accelerated use. New knowledge about the mesons is rapidly accumulating. It is most encouraging to note the increasingly effective integration of the work of theorist and experimentalist as the laboratory staff shifts into high gear.

The work in cosmic rays continues to be of great interest. Funds from the Office of Naval Research make it possible to construct a thirty-five-ton cloud chamber magnet with which it is anticipated we can study particles with energies above 10,000,000,000 electron volts, which occur only in cosmic rays so far as we know.

The keen strategic sense which led the staff in physics to develop a strong research program in the physics of solid states has become more apparent than ever as the military and industrial, as well as basic scientific, needs for knowledge in this field become increasingly pressing.

The twenty-five-inch reflector is almost complete, thanks to the persistent courage and efforts of the astronomy staff. When it is completed, we shall possess the largest portable telescope in the world and will be in a unique position to pursue certain important lines of astronomical inquiry.

Reports of geological research in the Pacific Islands will be published in the near future, and a manuscript for the United States Geological Survey on the larger foraminifera of Panama has been completed.

Scientific work in all fields will be greatly strengthened by the addition of the well-known mathematical statistician, Professor Wolfowitz, to the mathematics department staff. We have long needed such an appointment to provide the basic theoretical work upon which depends so much of our excellent statistical research done in the many departments of the College and of the University.

In general, the physical sciences division is in fair condition compared with other divisions of the College. However, there are still some important deficiencies to be worked on. It is highly desirable that the ad hoc committee appointed to consider the state and needs of the sciences at Cornell should be asked to continue its work in a more systematic manner with a view to long-range plans. Perhaps it could be one of several subcommittees of the over-all University planning committee, each of which should consider needs of the various major subject-matter divisions of instruction and research.

#### THE BIOLOGICAL SCIENCES

The Department of Zoology continues to be outstanding in the high quality of all phases of its work and in the nice balance it maintains among the values of advising, teaching, and research. The high proportion of its undergraduate majors who achieve distinction is testimony to the ability of the staff both to attract good students and to instruct them well. The research being conducted in ecology, placentology, embryology, endocrinology, and the physiology of sensory mechanisms is of such a basic and original character that its results will in a number of instances require significant revisions of theory and method in the several special fields.

The opening of new areas and development of new techniques plus the weight of teaching in this division of the College require that early systematic attention be given to increasing funds and staff and to the closer integration of the work in this field with that which may connect it with other fields bordering it, for example, physics, psychology, biochemistry, etc.

#### THE SOCIAL SCIENCES

It is a special pleasure to record the continued strengthening of this division of the College. The quality and content of instruction show substantial improvement, and the volume and significance of the research continue to be outstanding. The most important factor making for the effective mobilization and support of research talent is the Social Science Research Center. Through this organization the social science resources of the whole University are kept in close touch and made more readily available to staff with research interests that transcend conventional departmental lines. It is a tribute to the quality of the University social science staff members and to their spirit of cooperation that Cornell was selected as one of the thirteen universities to receive the \$300,000 grant from the Ford Foundation to encourage the strengthening of basic research in the human social behavior sciences. In addition, there have been generous grants from the Rockefeller Foundation, the Carnegie Corporation of New York, the Lilly Foundation, the Russell Sage Foundation, the National Institute of Mental Health, the Social Science Research Council, and the Viking Foundation, as well as contracts from government agencies. Most of these funds have gone to research which is being conducted under the sponsorship of the Social Science Research Center. You will doubtless receive a detailed report from the director of the Center.

Experience now makes it abundantly clear that well-qualified research men and women who have initiative and imagination and willingness to genuinely cooperate and who are adequately backed by the University administration, can find ample support for significant research on social phenomena. This is true for research conducted by teams of scientists as well as that conducted by individual investigators.

It is highly significant that many of the research undertakings made possible by collaboration among the different participants are of such significance that they are leading to a very desirable rapprochement between the social sciences and the technical applied and professional fields, and through them with the natural sciences. This has highly important educational and social implications and cannot fail to make an important impact on the instruction in this College as well as in the other divisions of the University.

In my new duties, which provide a more adequate national perspective on trends in the social sciences, I have become more aware than ever of the comparative strength achieved by the Cornell social science staff and the future promise of this development if it continues to receive the kind of attention and support it has thus far had from the administration.

There are serious gaps and needs which will be fully reported in the survey of needs of the University. The psychology laboratory needs a thorough renovation, the first step of which has happily been taken through the special appropriation by the University from its general funds and by the Social Science Research Center from its research facilitation funds. The social sciences need a common well-equipped building comparable to what other first-rate universities are now providing. If all of the departments cannot be housed in one building, then groupings with convergent interests such as anthropology, sociology, and psychology should be made, with adequate space and equipment; and if possible, the other social sciences should be in a near-by building with appropriate space and equipment.

My point here is that the social sciences at Cornell have come a long way since the war. They are potentially an even greater source of strength to the University if properly nourished. However, their present ability to attract substantial grants and contracts should not lull the administration into a false

sense of security for much remains to be done before the foundations are completely built.

#### THE HUMANITIES

It is somewhat difficult to report in brief summary on this division of the College because of its confused and contradictory state. On the one hand there are departments like the Division of Modern Languages, with a vigorous and highly competent staff brilliantly led, which has risen to a position of national leadership in language training and in linguistic scholarship; like the Department of Music, with its creative staff characterized by high morale and motivation, which is prevented only by the lack of adequate space and equipment and modest operating funds from achieving its maximum effectiveness; and like the Department of Philosophy with its well-coordinated team of outstanding and highly productive men. These departments offer the relatively simple administrative problem of finding adequate support to facilitate their programs and to provide the means whereby their work is properly coordinated with that of the rest of the College. On the other hand, there is, in the modern literatures and the classics, a conflict sometimes within the minds of individuals, between a kind of fear-ridden academic sclerosis and a desire for bold experimentation with fresh approaches to the problem of communicating the heritage of literature and the arts and of applying it in fresh ways to the present situation. It has been a constructive experience for the Dean's office and for the Committee on Educational Policy during the past two years to see this conflict and the problems it poses as it has studied the problems of the Division of Literature, the relations between the literature departments and the Division of Modern Languages, the Department of Classics, and the Department of Speech and Drama. These examinations have made it quite obvious that it will be difficult, if not impossible, to find new support for the literatures and the classics, or to give intelligent support even if funds are available, until men's imaginations and spirits are free so that they can consider with open minds the various alternative answers to the question of how literature and the other humane subjects can increase the effectiveness of their impact on the student during his educational career. It is also clear that the best way to break this impasse is to encourage and facilitate the exploration of fresh leads by individuals who have the initiative and imagination for such efforts and to protect such undertakings against any pressures which might seek to block or discourage such activity. This facilitation is highly important, because it is vital to the whole educational program of the College that the humanities once again take a dynamic and leading part in clarifying the values and objectives of what we are about and transmit to the student the sense of direction and drive that comes from a more intimate contact with his cultural heritage embodied in the products of man's creative spirit and aspiration. It should be reported that, despite the somewhat conflicting state of mind and spirit in this part of the College, there is plentiful evidence of excellent instruction, scholarly production, and artistic creation which may be noted in the individual departmental reports.

#### PROBLEMS AND NEEDS

Since there will be this year a special report from the committee on the survey of needs of the University, including the needs of this College, it will not be necessary for me to elaborate on them here. I should, however, like to call your attention to the eight points made in this section of my last year's report and to make the following observations.

1. Last year I urged a careful study of the optimal balance among the factors of size, income, and cost in the operation of the University. It is gratifying to note that we now have a committee charged with such a study. I urge that this committee be kept closely in touch with the committee which is charged with surveying the needs of the University and planning future



developments. I urge further that both committees achieve as clear a conception as possible and as much of a consensus as possible of the objectives of the University in general and of this College in particular and view their plans and proposals in the light of these objectives. It would help greatly to make plans fruitful if they are clearly relevant to agreed-upon objectives. In this effort and clarification it would be of great utility to promote Faculty discussion along the lines I have initiated in the informal seminar mentioned above. If full recognition is not given to the importance of defining objectives, then developments will be along the lines of plans whose unity, coordination, and effectiveness will be a matter of accident rather than of rational design.

2. I have not seen all of the needs reported by the separate departments but venture to predict that for the most part they will fall under points 4 through 8 in my last year's listing: maintenance of plant and equipment, library, fellowships and scholarships, research and publication funds, a more adequate salary scale. These are still the acute needs in all divisions and are most acute in the social sciences and the humanities. These are not merely the empty complaints of a never-satisfied Faculty. These are the critical minimal requirements for a healthy college and university in the next phase of its existence. Some reasonably adequate provisions for meeting them now are clearly necessary; the alternative will almost certainly be deterioration.

In concluding my report I should like to record the keen satisfaction I have had in my term of service as dean of this College and to acknowledge with sincere gratitude the generous cooperation it has been my good fortune to have from the College Faculty and administrative staff, from the other divisions of the University, and from the central administration. My warmest welcome and best wishes go to President Malott and to the new dean of the College when he is chosen. I look forward with a confident optimism to this next phase of the University's history. In doing so, I discover a poignant regret that my new responsibilities, attractive though they be, make it impossible for me to be on duty here for a while longer.

LEONARD S. COTTRELL, JR.  
Dean of the College of Arts and Sciences

## APPENDIX IX

### REPORT OF THE DEAN OF THE COLLEGE OF ARCHITECTURE

*To the President of the University:*

SIR: I have the honor to present a report of the College of Architecture for 1950-51.

#### ENROLLMENT

Enrollment continued at the maximum from the point of view of physical facilities and staff. A total of 215 undergraduates and 25 graduate students were registered in the fall term. This is a drop of eight students from the peak enrollment of 248 in the fall term of 1949-50. The number of students enrolled in the program leading to the degree of Bachelor of Fine Arts has steadily increased since that program was reorganized in 1946. Undergraduate registration increased from 45 in the fall of 1949 to 55 in the spring term of 1950-51.

The number of graduate students doing major work under the Faculty of this College has remained high and reflects a policy for the development of graduate work effective since the war.

The College continues to draw its student body from all parts of the United States and from many foreign countries. Undergraduates came from twenty-nine states and from Afghanistan, Brazil, Canada, China, Colombia, Haiti,

## PRESIDENT'S REPORT

Hawaii, Norway, Panama, Puerto Rico, and Venezuela. Among the graduate group were students from Canada, China, Greece, India, the Philippine Islands, Siam, and Turkey.

The following table summarizes the enrollment for the academic year:

## FALL TERM, 1950

Undergraduates*	215
Architecture	158
Fine Arts	48
Land Planning	9
Graduates†	25
Architecture	3
Regional and City Planning	12
Fine Arts	6
Landscape Architecture	3
Noncandidate	1
TOTAL	240

## SPRING TERM, 1951

Undergraduates*	206
Architecture	143
Fine Arts	55
Land Planning	8
Graduates†	21
Architecture	4
Regional and City Planning	11
Fine Arts	4
Landscape Architecture	1
Noncandidate	1
TOTAL	227

\* Undergraduates from 29 states and from Afghanistan, Brazil, China, Canada, Colombia, Haiti, Hawaii, Norway, Panama, Puerto Rico, Sweden, and Venezuela.

† Graduates from China, Greece, Nova Scotia, Philippine Islands, Siam, India, and Turkey.

## RECOMMENDED FOR DEGREES

September, 1950:	
Master of Fine Arts	1
Master of Regional Planning	1
January, 1951:	
Bachelor of Architecture	11
Bachelor of Fine Arts	3
Master of Regional Planning	2
June, 1951:	
Bachelor of Architecture	25
Bachelor of Fine Arts	14
Bachelor of Science in Land Planning	2
Master of Architecture	1
Master of Landscape Architecture	2
Master of Fine Arts	3
Master of Regional Planning	2

## FACULTY

Eugene D. Montillon, Professor of Landscape Architecture, after serving the University faithfully for forty-one years, retired on June 31, 1951, and was elected by the Board of Trustees Professor of Landscape Architecture, Emeritus, effective July 1, 1951.

Frederick M. Wells, Professor of Architecture, was appointed Andrew Dickson White Professor of Architecture by the Board of Trustees, effective July

1, 1951. During the spring Professor Wells was awarded the Langley Fellowship of the American Institute of Architects, for a study of design principles and a survey of the methods of teaching architecture in European schools. He left early in June for eight months in Europe where his headquarters will be at the American Academy in Rome.

A. Henry Detweiler, Professor of Architecture, was granted a leave of absence for five weeks during the year to inspect the remains of a palace, reputed to have belonged to King Herod, discovered in the Hashemite Kingdom of Jordan. Professor Detweiler's study was made at the behest of the American Schools of Oriental Research. He has been elected an associate trustee of that organization and appointed chairman of its committee on the Jerusalem School.

Gilmore D. Clarke, Professor of Landscape Architecture, served during the year as president of the American Society of Landscape Architects.

Kenneth Evett, Assistant Professor of Fine Arts, held an exhibit of his paintings at the Kraushaar Gallery, New York City, in March, 1951.

An oil painting by Joseph M. Hanson, Associate Professor of Fine Arts, was included in the Carnegie's International Exhibition of Paintings held in Pittsburgh in October, 1951. Professor Hanson was one of 100 American painters invited to exhibit in this international show.

The policy of the College in bringing to the campus for five-week periods, as visiting critics in architecture, distinguished practitioners and teachers was continued. Visiting critics in 1950-51 were William J. Hennessey, New York, architectural critic and editor; Kenneth Day, Philadelphia, practicing architect and formerly visiting associate professor of architecture at Yale University; Robert F. Bishop, Philadelphia, member of the architectural firm of Bishop and Wright; Caleb Hornbostel, New York, practicing architect, editor, and teacher of architecture at New York University, Cooper Union, and Pratt Institute; and Igor Polevitzky, Miami, practicing architect, whose work has been the subject of no less than twenty-five articles in national magazines and journals in the past few years.

The Faculty and students are enthusiastic about the value of the visiting critic program. We hope to make it a continuing feature of College policy. Mention must be made of the generosity of Professor G. D. Clarke, who made available to the College at no cost an apartment for the use of the visiting critics.

Norman Daly, Associate Professor of Fine Arts, was granted sabbatic leave for both terms to study and paint in France.

Kenneth Washburn, Associate Professor of Fine Arts, was granted leave of absence for the year to teach at San Jose College in California.

Robert P. Lang, Assistant Professor of Fine Arts and Secretary and Librarian of this College, and James L. Steg, Instructor in Fine Arts, resigned as of June 31, 1951. Professor Lang has accepted a position as librarian of the New Paltz State Teachers College, and Mr. Steg will be an instructor in fine arts at Sophie Newcomb College of Tulane University. Both contributed much to the College during their service at Cornell.

The following staff appointments were made: Eric Quell, Instructor in Architecture; Victor Colby, Instructor in Fine Arts; and Robert Hoover, Lecturer in City Planning.

Thomas W. Mackesey, Professor of Regional Planning, was made acting dean of this College, effective July 1, 1950, and dean as of May 1, 1951.

#### COUNCIL OF THE COLLEGE

Trustee J. Carlton Ward, Jr., M.E. '14, of Farmington, Connecticut, was elected to the Council of the College for a one-year term, and Trustee Herbert Fiske Johnson, A.B. '22, of Racine, Wisconsin, was re-elected for a one-year term. Both terms expire June, 1952.

The other members of the Council are Irwin L. Scott, B.Arch. '23, of New York City (term ending June, 1952); Michael Rapuano, B.L.A. '27, of Newtown, Pennsylvania, who was re-elected for three years (term ending June,

1954); Professor Hubert E. Baxter, B.Arch. '10 (term ending June, 1952); and Professor John A. Hartell, B.Arch. '25 (term ending June, 1954).

The ex-officio members are President Deane W. Malott, Chairman; Vice President Willard I. Emerson; and the Dean of the College.

#### FELLOWSHIPS AND SCHOLARSHIPS

Gardner Ertman, B.Arch. '51, of Kingston, Massachusetts, was awarded the Robert James Eidlitz Fellowship in the amount of \$1,200 for foreign travel and study.

Robert F. Gatje, B.Arch. '51, of Brooklyn, N.Y., was the first recipient of the Skidmore, Owings and Merrill Scholarship of \$1,000 to an outstanding member of the fifth-year class. Mr. Gatje was also awarded the American Institute of Architects Medal for the best record throughout his entire course of study, the Medal of the New York Society of Architects for the best performance in the courses in construction, and the Clifton Beckwith Brown Memorial Medal for the highest standing in architectural design.

Three graduates of the College studied in Europe under Fulbright Scholarships during the year. They were John W. Reps, M.R.P. '47, United Kingdom; Henri V. Jova, B.Arch. '49, Italy; and Walter B. VanGelder, B.Arch. '50, Netherlands.

Three additional graduates were granted Fulbright Scholarships for 1951-52. They were Robert F. Gatje, B.Arch. '51, United Kingdom; Gerrard S. Pook, B.Arch. '51, Italy; and William B. Doan, B.Arch. '50, France.

Miss Shirley J. Kerr, B.Arch. '50, was named an alternate for studying in France.

It is a source of pride to me that of a total of twenty-eight former Cornell students who have been awarded Fulbright Scholarships over the past two-year period, six have been graduates of the College of Architecture.

#### RESEARCH

During the past year the College took an active part in the establishment of two research centers on the campus—the Housing Research Center and the Center for Integrated Aerial Photographic Studies. The dean is associate director of the Housing Research Center and is co-director of two studies currently under way with the support of funds from outside sources. These studies are: *Delineation of Labor and Housing Supply Areas for Defense Plants Based on Industrial Workers' Commuting Patterns during World War II and the Current Period*, sponsored by the U.S. Housing and Home Finance Agency with a grant of \$32,300 for a nine-month period; and *Social Science Applications to Housing Design*, a two-year study sponsored by the Russell Sage Foundation with a grant of \$25,250.

The College of Architecture is one of the cooperating departments in the Center for Integrated Aerial Photographic Studies, and the dean is a member of the executive committee of that Center.

During the spring term a team of graduate students in city and regional planning made a study of the Binghamton Metropolitan Area with the cooperation and financial support of the Broome County Planning Board.

#### POSITION OF THE COLLEGE

The College today is vigorous and forward-looking. The student body is highly selective, and the general level of student performance is high. The Faculty is young, energetic, and competent. The physical plant in which the College is confined is a real handicap, although not sufficient to dull the spirit of the study body nor dampen the enthusiasm of the Faculty. It is no exaggeration to say that the College of Architecture carries on in two garrets, a basement, and a burned-out building that was scheduled for razing twenty-five years ago. Some branches of instruction are handicapped for lack of proper laboratory space. Our library, one of the finest architectural collections in the

country, is now so crowded that we do not know where we can shelve the normal anticipated acquisitions during the coming year. Exhibition space, seminar rooms, and classrooms are altogether inadequate.

In assuming the deanship of the College of Architecture, I recognize three fundamental problems facing the College: a suitable physical plant, adequate Faculty salaries, and increased scholarship support for able students. I shall work toward the solution of these problems.

THOMAS W. MACKESY  
Dean

## APPENDIX X

### REPORT OF THE DEAN OF THE COLLEGE OF ENGINEERING

*To the President of the University:*

SIR: I have the honor of presenting the following report of the College of Engineering for the academic year 1950-51.

#### ENROLLMENT

As has been customary, Tables I and II record first-term enrollments in the College for a ten-year period and first-term freshman enrollments over this same period.

TABLE I. COLLEGE ENROLLMENT.

<i>School</i>	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
C.E.....	227	241	233	231	164	432	449	374	335	260
E.E.....	193	222	301	367	246	569	577	554	473	346
M.E.....	760	800	803	689	380	933	983	897	734	641
Chem.E....	337	353	310	170	83	438	392	362	357	318
E.Physics...	...	...	...	...	...	17	45	65	92	108
Aero.E.(Grad.)	...	...	...	...	...	12	19	18	22	18
TOTALS....	1517	1616	1647	1457	873	2401	2465	2270	2013	1691

TABLE II. FRESHMAN ENROLLMENT.

1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
560	645	518	509	201	408	424	449	557	482

Enrollment in relation to Selective Service is a matter of University-wide scope so that under present policies and regulations the effect within the College of Engineering is not greatly different from that in other divisions. Thus far only very few students have not been covered by educational deferment procedures. Nevertheless, Selective Service may become a serious factor in future enrollments; even at this time there is a possibility that the discretionary privilege permitted draft boards in educational deferments may result in losses during the summer.

The drop in freshman registration last fall reflects a general situation with rather alarming implications for national security and welfare in this critical period. Happily, the decline at Cornell was somewhat less than the national average and far less than that suffered by some of the large engineering schools in various sections of the country. Nevertheless, the problem is of such scope and magnitude that it is certain to distort the normal influences upon engineering education for a long period to come.



I intend to return to this matter in a later section, since I feel it is appropriate, and in fact urgent, to relate it and other major factors of the times to a report not only of a year's progress in the College but also of the responsibilities, the opportunities, and the problems before us.

#### THE STAFF

It is with deep regret that I report the death of three members of the Faculty during the academic year: Stanley L. Schauss, Associate Professor of Electrical Engineering, January 24, 1951; John T. Parson, Professor Emeritus of Civil Engineering, April 28, 1951; and Earle N. Burrows, Associate Professor of Civil Engineering, May 6, 1951.

The following members of the Faculty resigned during the course of the year: Assistant Professor A. G. Keenan and Associate Professor R. M. Mains of the School of Civil Engineering; Assistant Professor B. Nichols of the School of Electrical Engineering; Assistant Professors C. R. Otto and F. Saltz, and Associate Professor L. L. Otto, of the Sibley School of Mechanical Engineering.

New appointments during the year included D. A. Stuart, Assistant Professor of Engineering Materials, and N. Rott, Assistant Professor of Aeronautical Engineering.

Promotions during the year were as follows: in the School of Civil Engineering, B. K. Hough, Jr., to Professor; in the Sibley School of Mechanical Engineering, A. S. Schultz, Jr., to Professor; H. H. Mabie and D. G. Shepherd to Associate Professor; R. M. Phelan to Assistant Professor; in the Graduate School of Aeronautical Engineering, A. Kantrowitz to Professor.

The critical need for engineers in industry and the armed forces has brought increasing pressure upon many members of our staff from both sources. A number of the younger men have been called up as reservists, and several others have accepted positions for which they are particularly well qualified and which offer both unusual financial reward and personal opportunity. It is gratifying to note, however, that among the senior staff our losses for this reason have been very few thus far despite various opportunities offered. It is evident that the good will created by the University's efforts to establish a more satisfactory salary basis in the past year has been perhaps fully as effective as the resulting financial adjustments in maintaining staff morale. Beyond this the many research activities of the College and the satisfaction of participating in the training of young engineers in the face of great need have undoubtedly contributed much to our stability.

#### STUDENT BODY AND CURRICULUM

June 11, 1951, marked the graduation of the first full class in the five-year curricula. (It will be recalled that Chemical Engineering has been on a five-year basis since 1938.)

One hundred and sixty-five degrees were awarded in the undergraduate five-year curricula, as follows: Chemical Engineering, 41; Metallurgical Engineering, 9 (first graduates); Civil Engineering, 24; Electrical Engineering, 28; Mechanical Engineering, 49; and Engineering Physics, 14 (first graduates).

Understandably, the College has watched the progress of the class with great interest. In reporting on the completion of this first cycle of the new program, I believe it is appropriate to set down briefly some of the broad principles upon which it is based, especially since it is a program of truly University proportions and one in which the College draws heavily and gratefully upon the facilities and intellectual resources of other divisions of the University.

One of the primary objectives in the design of the curricula is the better sequential arrangement of courses and the stronger integration of basic science and engineering principles throughout the technological training. Too often this background knowledge is very literally "background," and subsequent technical courses are completely insulated from it. We believe the members of this class have achieved a notable proficiency in fundamentals and in the application of basic tools to complex problems.

Perhaps the most significant mark of this ability has been in the development of their senior projects. These were of very real solidity—not merely so-called senior theses or senior designs on standard problems—and, as was intended, they called for originality, initiative, and resourcefulness in the use of acquired knowledge and skills.

In simplest terms, it is our purpose to use this curriculum as substance, and the whole climate of the University as inspiration, in building for professional and social leadership. A considerable portion of the curriculum is, therefore, devoted to studies in other divisions of the University, particularly in the College of Arts and Sciences. There is carried throughout the curriculum a basic core of studies in English, public speaking, history, psychology, and economics. This is deliberately extended vertically through the five years so that such studies and associations become a natural part of the young engineer's professional preparation, rather than a required hurdle to be topped and left behind. Admittedly, he cannot be deeply infused in any of the humanistic disciplines in the time available, nor is this intended. Rather, this experience is to be a means of extending new horizons—of intellectual stimulation for minds already directed toward objective and purposeful thinking.

I dwell briefly on these philosophical aspects of the five-year engineering curricula because Cornell engineering stands today, I believe, at a crossroads position of vital significance to the University. For mapping the path ahead the concept of our objectives must be clear and resolute.

In recent years the widespread criticism of engineers for lack of social consciousness and effectiveness has reached a crescendo (although I must say that such criticism takes very little account of the impressive contributions of many engineers to economic, political, and social achievements of the past century). If, as we believe, the engineer will now be called upon to take a more dominant part in the human affairs which his works affect so profoundly, and at the same time to apply his technology even more assiduously to the world's primary ills of hunger, poverty, disease, and ignorance, then there is available to Cornell an almost unique opportunity for extending through her engineers the beneficent influences for human progress to which this institution is dedicated. It is unique not only in timing, but also in the fact that few institutions today have a comparable combination of strength in the scientific and technical components of an engineering curriculum, in the stimulating association of scholarly pursuits of all kinds, in the liberal traditions of self-development, and in the distinguished position of alumni.

These are factors which can lead to an unprecedented eminence for the College and the University. The achievement requires a more than adequate performance on the part of the College; but if our engineers are to be prepared for leadership both within and beyond their profession, perhaps the greatest responsibility rests with our colleagues in other areas of the University in whom we place with confidence the trust for the development of an inspired curiosity toward man and his affairs.

These broad views of curriculum and objectives gradually achieved definition with the progress of the class of 1951. We took occasion to review critically the operation of the program, and quite understandably found faults and deficiencies as well as many points of strength and promise.

Within the year a Faculty committee undertook a comparative analysis of Cornell engineering curricula and those of leading institutions representative of all sections of the country and of all types of organization, public to private and university to technological institute. Representatives of the Faculty also attended a conference of five-year engineering schools (Ohio State, Minnesota, University of Louisville, and Cornell) and exchanged views on objectives, procedures, and problems.

Approaching the subject from another direction, we have encouraged our students to comment freely on all aspects of the program. It has been a matter of real satisfaction to note the manner in which the students have gained the comprehensive significance of the program and have given a completely perspective view to their analyses.

Alumni probed deeply on their own. Meetings arranged by the Cornell Society of Engineers and several Cornell Clubs brought staff members to various sections of the country for discussions. In the spring of the year a group of seniors chosen at random presented an extemporaneous panel discussion before the Cornell Society of Engineers in New York, which resulted in an extremely favorable reaction to the men personally and a high regard for the effectiveness of the curriculum as evidenced by their performance.

The impression among employment representatives on the campus this spring was equally successful—in fact, this took the tangible form of above-average salary offers for a large part of the class. A number of companies and government agencies with fixed salary brackets set the Master's rating classification for the five-year graduates, and most others with flexible schedules approached this same basis in effect.

I should not wish to imply that an attitude of complacency permeates the College—quite to the contrary. We recognize many areas needing improvement, and we are particularly sensitive to our physical deficiencies. Furthermore, we are well aware that the five-year curriculum represents a major departure from the traditional concept of engineering education, and as such it cannot expect, nor does it have, unanimous approbation. Nevertheless, we are convinced of the inherent strength of this curriculum while remaining inquisitive as to its details.

One point of pride to which we do lay claim is the caliber of this first graduating class in the five-year curriculum. They left here not only with superior academic background but with maturity and resourcefulness beyond the ordinary. I look forward with great anticipation to their professional progress.

#### GENERAL OPERATIONS

Because this report has taken the form of a rather broad consideration of the operations and objectives of the College, some of the annual factual material related to research, to laboratories and equipment, and the like has not been included. I should like to refer for this purpose to the report submitted last year (1949-50) in which a quite detailed review of the work and developments within the various schools and departments of the College is carried. A full listing of research activities is also recorded. For the most part this information remains applicable to the present situation of the College.

Most research projects reported at that time continued throughout the year, and others were added so that research activity remains at a high level but, we believe, in proper balance with the major academic functions of the College.

Generally, basic research does not lend itself to widespread public appeal. Nevertheless, a number of our projects attracted considerable attention at public as well as professional levels and in the latter area resulted in significant recognition in the form of awards and conference invitations for some of our staff.

It is also well to report that a fair number of our staff continue cooperative association with the Cornell Aeronautical Laboratory in Buffalo and with the Brookhaven National Laboratory on Long Island.

#### THE TASK COMMITTEE AND COLLEGE DEVELOPMENT

The Engineering Task Committee was organized in June, 1950, under instructions of the Board of Trustees. The committee is composed of the following: Col. F. W. Scheidenhelm, representing the Engineering College Council; J. Carlton Ward, Jr., representing the Board of Trustees; Creed Fulton, representing the Cornell Society of Engineers; Dr. T. P. Wright, representing the University administration; Professor M. S. McIlroy, representing the College of Engineering Faculty; and Dean S. C. Hollister, Chairman.

During the year the committee has engaged upon a comprehensive study of the College in all its functions; has considered its relationship to the University, its present operations and its future course; and is now applying its

studies to both a philosophical and physical program for the development of the College.

A report of this committee will be forthcoming in the near future, so I do not propose a detailed review of its activities here. However, several results of major importance to the College have already been accomplished, and it seems appropriate to refer to these.

In brief, the committee concluded in the course of its studies that drastic improvement of College facilities was essential for satisfactory operation. It reaffirmed the area at the south end of the campus previously assigned to College development as the only suitable area available for this purpose.

The committee reviewed the several stages of the College of Engineering Development Plan against the background of its own studies. As the work progressed, the increasingly critical national situation introduced a greater sense of urgency for the activation of such projects in the Development Plan thus far favorably disposed in the view of the committee. Attention was focused on three pending projects which, it was felt, were entirely definitive within the committee's concept of the over-all plan, and which reflected both immediate needs of the College and financial support available.

Accordingly the Task Committee recommended, and the Board of Trustees approved, implementation of the following steps as soon as possible:

1. Construction of the materials and materials processing laboratories on the site selected at the south end of the proposed engineering campus.
2. Reassignment of a site for the new electrical engineering building from the Sage College area to the area between East Avenue and Hoy Field, and authorization to the architects for adaptation of the electrical engineering building plans to this site.
3. Reconstruction of the high voltage laboratory on the original site.

Progress has been made on each of the recommendations, with the construction under way on the materials laboratories representing the most visible accomplishment to date. Preliminary steps for construction were started last fall. At this writing the building is beginning to take shape "out of the ground."

The fund available for this building had been accumulated by alumni and friends of the College and totaled slightly over \$1,000,000. This sum would have been very adequate at the time construction was planned originally, but the continuing inflationary trend of the postwar years brought us to a minimum estimate of about \$1,700,000 at the time of final approval last fall. Even to hold to this figure, a severe pruning to absolute essentials has been necessary.

A distinguished committee of alumni, headed by Walker L. Cisler, is actively engaged in raising the additional sum required. There is every reason to expect a successful accomplishment of this effort. In the meantime the College has pledged this amount as security from certain special funds available to it so that the work can proceed without jeopardy to general University funds.

The materials laboratory will bear the name of Robert Henry Thurston, Director of Sibley College from 1885 to 1903. Among his many lasting achievements in engineering and education, perhaps none have had more profound effect than his pioneering work in the field of engineering materials and in the scientific experimental approach to engineering problems. This laboratory will continue the tradition established by Professor Thurston.

The materials processing laboratory will honor Dexter S. Kimball, Dean Emeritus of the College. Appropriately this laboratory will carry on work in metals processing and industrial production, fields in which Dean Kimball has made many and outstanding contributions both as teacher and engineer.

These laboratories will perform invaluable service in the operations of the College. Their work in both instruction and research will be at the core of studies throughout the College. The unusual facilities of the laboratories will be of interest to our colleagues in other areas of the University, I am sure, and will provide a stimulating environment for exploration in many directions.

In accordance with the recommendations of the Task Committee, the architects for the electrical engineering building are proceeding with an adjustment



of plans to the new site. Problems related to the reconstruction of the high voltage laboratory are also under study.

It should be emphasized that the Task Committee is continuing its studies and will report fully on the entire Engineering Development Plan in due course.

As I have said, this report has been concerned largely with broad considerations in the progress of the College. I believe it is pertinent in concluding to draw some of the basic relationships between these factors and to evaluate our position accordingly.

One of these is the matter of enrollment, or more properly the whole engineering manpower situation. The critical shortage of engineers has been intensified, of course, by defense mobilization, but this is by no means the only ingredient. Studies conducted over the past year reveal a normal peacetime need of engineering graduates for replacements and for reasonable industrial growth considerably in excess of estimated graduations for some time to come.

The problem is made up of a number of components, many of which are being attacked by the profession and other agencies concerned. One, however, is unalterable, and that is the fact that high school graduations for the next six years or more will be at a low level, reflecting the low birth rate of the depression period.

As we face a future in which the maintenance of peace may well depend upon our scientific and technological superiority, or in which war, if it comes, most surely will be decided by this factor above all others, the implications of our situation are clearly evident. It is not in the scope of this report to discuss the corrective efforts under way, but I am pleased to say that the College is cooperating fully with the agencies working on the problem.

In the matter of the direct effect upon the College, it is evident that two conflicting influences are involved. First, it would seem that the demand for engineering personnel would stimulate enrollment. Against this, however, the number of high school graduates available for engineering training will remain at a low level for some years. In addition, a tightening of Selective Service policy toward educational deferment can produce immediate shrinkage anywhere along the line. There will be a highly competitive situation among engineering schools for prospective students under these circumstances.

The College operations are intricately geared to enrollment, and large fluctuations have serious ramifications. Most obviously, income declines with decreased enrollment while many major expenses remain relatively unchanged. Beyond this, however, the optimum size of the College is part of a pattern in which the work to be performed for the position we occupy requires a certain range and depth of professional talent and facilities, which in turn must be supported by an adequate enrollment. We cannot drastically reduce operations without long-time detrimental effects.

A reasonable stability of enrollment is thus of primary importance for the period ahead. Achievement will be no easy matter. Many schools now enjoy a public recognition for engineering training which, at the turn of the century, was shared by Cornell with only a handful of others. Of particular significance to the prospective student, the annual cost at Cornell is far above that at the state institutions and close to the highest among the private institutions.

Competitively, then, the College can justify its position only on the basis of a superior education and a more fruitful collegiate experience. I believe we can do this. I am confident our curriculum will gain wide recognition for its deeper concept of professional requirements and for its stimulation to individual development. But the curriculum in itself is only a good plan, and quite probably in time will be approached by others. The strength of our position will depend upon the manner in which it is implemented—upon the quality of our students, Faculty, and facilities, and especially upon the whole climate of the College and the University.

Obviously this design is not merely concerned with the problems of the next five or ten years. It reflects, rather, the more comprehensive picture of education for the profession of engineering in the sense of these times. A vast number of young engineers today are being trained essentially for



the profession of twenty-five years ago. True, many of these will perform adequately in the standardized operations of engineering and industry, and some will achieve considerable success. But there remains the need to train for leadership on a professional level—to provide the background upon which engineering practice can be advanced, and to inspire toward such achievement. Especially now, as not only the scientific and technical aspects of engineering become more complex, but as also the need for participation by engineers in human affairs becomes more urgent, the concept of training for leadership takes on profound dimensions.

I believe this to be at once a great responsibility and a great opportunity for Cornell. As I have said before, I believe that few institutions have a more favorable combination of the elements of such training. We will need to accomplish many physical things, and we will need to gain public recognition of our objectives, our potential, and our results. Most of all we will need the attitude and determination within the College and the University and among our alumni to bring Cornell engineering to the most eminent position in the field. I am confident this will be done.

S. C. HOLLISTER

Dean of the College of Engineering

## APPENDIX XI

### REPORT OF THE DEAN OF THE LAW SCHOOL

*To the President of the University:*

SIR: I have the honor to present the report of the Law School for the academic year 1950-51.

#### THE FACULTY

Professor Lyman P. Wilson died suddenly, without previous illness, on April 20, 1951. Having served thirty years as professor of law at Cornell, he would have become professor emeritus on July 1 of this year and had accepted an appointment to continue his instruction in torts and choice of remedies during the next academic year.

Born in Leslie, Iowa, January 21, 1883, he graduated from Knox College with the degree of B.S. in 1904 and from the Chicago University Law School, with the J.D. degree in 1907. Knox awarded him an honorary LL.D. in 1924.

When he came to Cornell in 1921, as professor of law, he brought with him a wealth of experience as private practitioner and city attorney in Galesburg, Illinois, and as a teacher of law at Idaho, Oklahoma, and George Washington Universities. At those institutions and later at Cornell and in summer sessions at Columbia and Chicago Universities, he taught nearly every subject in a law school curriculum. With that background, he was always found ready and willing to adapt his own program to accommodate situations resulting from changes in Faculty personnel or to fill emergency gaps caused by illness. At Cornell, his chief study and instruction was in the law of torts, and it was in that field that he wrote law review articles and published his case book, the third edition of which was in preparation at the time of his death. He had unique ability and extraordinary success in the conduct of a practice court. His students annually testified with enthusiasm to the benefits derived from practice before that court.

He could always find time, in his office or at his home, to give a hearty welcome and patient counseling to students who sought advice upon their

personal or academic problems. They took his friendship with them into their careers and returned it with warmth and reverence.

In the Faculty team, he was always a wheel-horse, willing to pull more than his share of the load, cheerfully receptive to committee assignments, and contributing good judgment and dispatch to the committees' deliberations and conclusions.

His temperament and good fellowship, his reputation for straightforward expression tinged with humor, and for sound reasoning bounded by understanding and unselfishness inevitably attracted his impressment into the service of the University and the community. He was continuously on duty with some important university committee, such as the Committee on Inter-Faculty Relations and the Committee on Student Conduct. Off campus, he was an ardent Rotarian and president of the local Rotary Club in 1930-31; on the budget committee and vice-president of the Community Chest; three times president of the Council of Social Agencies between 1926 and 1935, and director of the Tompkins County Community Fund during the second World War.

In the law school world, he had a host of friends, was a regular attendant at the annual meetings of the American Law School Association, participated in its round tables, served on its committees, and was elected its president for the year 1943-44.

In his thirty years of devoted service to the Cornell Law School, he added to its distinction and contributed to the spirit of good fellowship between Faculty and students.

The Law School sustained another loss through the resignation of Professor Sherman Peer, who, since his retirement as general counsel of the G.L.F. Cooperative Association, had been giving his services part-time and gratuitously to conduct a problem course in the law of cooperatives. With the wealth of his practical experience in counseling a large cooperative enterprise, he was uniquely qualified to impart knowledge in this field of law which has growing importance in our modern economy. I wish to record the Faculty's appreciation and the University's indebtedness to Professor Peer for the loyalty and interest which inspired his generous contribution to the Law School and to legal education.

I am happy to report, however, that the course on problems in the law of cooperatives will be continued by the present general counsel of G.L.F., George R. Pfann, who succeeded Professor Peer to that office. Upon the recommendation of the Faculty of law, he has been appointed by the Board of Trustees Professor of Law for the year 1951-52 and has accepted that appointment with like loyalty and enthusiasm.

Of great significance to the Law School was the action of the Board of Trustees, at its October, 1950, meeting, making the J. DuPratt White and the Edwin H. Woodruff Professorships of Law available for use at the beginning of the fiscal year 1951-52. At its meeting in April last, the Board, upon recommendation of the dean, appointed as the first incumbents of these new chairs two senior members of the Faculty, Professor Horace E. Whiteside and Professor George J. Thompson. Professor Whiteside has been a member of the Faculty since his graduation from the Law School in 1922. He did his undergraduate work at Chicago and received an S.J.D. from Harvard in 1927. He is an authority in the fields of trusts and future interests and was for several years associated with the New York City firm of Whitman, Ransom, Coulson and Goetz. Professor Thompson is distinguished in Dean Woodruff's special field, the law of contracts. He served as consultant in the American Law Institute's "Restatement of the Law of Contracts" and was coeditor with Professor Williston of Williston and Thompson, *The Law of Contracts*. He is a graduate of the University of Pennsylvania and has the LL.B. and S.J.D. degrees from Harvard. He came to Cornell in 1926 from the University of Pittsburgh Law School.

The income from each of these two memorial funds is not yet equal to the professorial salaries, but alumni committees are hoping to obtain additional contributions until the income fully supports the chairs.

In January, the University was notified that under the will of William G. McRoberts, '98, of Peoria, Illinois, who died in December, 1950, the residue of his estate was left in trust to pay the income to his wife for life and, upon her death, to transfer the principal to Cornell University "for the endowment and support of a full professorship devoted to the continuous and scientific study of the administration of the law (in relation to community government and by the courts). The corpus of said trust fund to be held intact by said University and invested and reinvested and the income only devoted to and expended for the purpose of such study and in advising law students, legislative bodies, bar associations, and the public of the facts and conclusions arrived at. The purpose of such scientific study shall be to determine the quality of the administration of the law by the courts and public officials throughout the various states and communities and to determine the honesty or dishonesty of such administration. The whole subject matter to be dealt with and reported upon from the viewpoint of the welfare of the individual and the public and not from the official viewpoint and with the idea of informing the public where the highest standards are set and the best results obtained and the reasons why and the causes or influences contributing to the results."

Professor Keffe was on sabbatic leave during the fall term of the present year. At the January meeting of the Board of Trustees, two members of the Faculty were granted sabbatic leaves during the year 1951-52, Professor Freeman for the fall term and Professor Larson for the spring term. At the April meeting, Professor Robinson, who became emeritus professor in 1949, and Professor Wilson, who would have become emeritus professor this July, were appointed to continue part-time teaching for the next academic year.

Professor Shannon, who has been giving the course in legal accounting in the Law School, was promoted from associate professor to professor of law following his elevation from associate professor to professor of accounting in the School of Business and Public Administration.

#### THE STUDENT BODY

The student body for 1950-51 again reached an all-time high. It was the first year since the war in which the administration had not put a limitation upon the enrollment of each school and college. The growth in the Law School is shown by the following figures: 1947-48, 375; 1948-49, 375; 1949-50, 412; 1950-51, 459. The increase of 22 per cent in two years is to be compared with a 10 per cent drop, during this same period, of the total law student population of all American law schools. The combined figures for eight eastern and midwestern schools showed an average drop of 9 per cent. The growth of our enrollment is due to a steadily increased attraction of graduates from colleges other than Cornell. Of the 459 students enrolled in September, 26 per cent, or 118, came from Cornell. The balance of 74 per cent, or 341, represented 118 other institutions. The first five of these in the order of representation were: Syracuse, Dartmouth, Hamilton, Yale, and University of Rochester. The distribution according to classes was: first year, 172; second year, 151; third year, 136.

The physical accommodations of Myron Taylor Hall proved adequate for the 459 students. However, it is unlikely that the same figure will be equaled again for some years. It has been apparent for some months that the country's need for increasing the military services will reduce law school enrollments and particularly the size of classes entering in September, 1951. Serious consequences will result also from the fact that the number of veterans entitled to G.I. benefits is diminishing. The existence of G.I. assistance has enabled law schools to compete on a parity with respect to the financial situations of students. But, with the vanishing of this government aid, Cornell, with its wholly inadequate scholarship funds for law students and with its total figure for tuition and fees the second highest in the country, will be at a distinct disadvantage competitively.

It is noteworthy that in the New York State Bar Examination of June, 1950, Cornell graduates taking the examination for the first time were 87 per cent

successful. There was an interesting correlation with law school grades. The upper quarter of the class of 1950 was 100 per cent successful, and those who graduated in the second and third quarters were 93 per cent successful.

The regional meeting of the American Law Student Association convened for a two-day session in Myron Taylor Hall in April. The Association, sponsored by the American Bar Association, meets annually at the time and place of the Bar Association's annual meeting. The national membership of the Student Association is divided into eleven judicial circuits, each with a vice-president. At the national meeting in Washington in September, 1950, Fred-eric Woodruff, '51, was elected vice-president for the second circuit.

In the New York State Bar Association's contest for essays on the constitution of the United States, Norman E. Joslin, '52, won the first prize for his essay, "Limited Government or Limited People."

The Boardman Scholarship, awarded to the third-year student who stands highest in his class at the end of the second year, was won by Edward W. Middleton from Princeton. Harry Margolis from Antioch College and Walter C. Wallace from St. John's University were elected to the first and second Fraser Scholarships from a list of the ten ranking students in the third-year class. The W.D.P. Carey prizes for excellence in the comprehensive written and problem examinations were divided evenly between Kenneth L. Estabrook from Cornell and Agnes Betty Kranzer, also from Cornell.

#### THE LAW SCHOOL'S FINANCIAL POSITION AND NEEDS

The extent to which the financial position of the Law School has been strengthened in recent years was detailed in the last report. It was shown that an increase in the budget from \$100,000 to \$170,000 between 1937 and 1949 was productive of an increase in income from \$77,000 to \$274,000. Income, instead of being \$23,000 less than the budgeted cost, became \$100,000 in excess of the budgeted cost. This improvement was reflected in the figures assembled by the Treasurer's office, which showed that for the year 1948-49 the per-student cost of instruction was less in the Law School than in any of the other endowed schools or colleges of the University. In other words, the operation of the Law School drew less, per student, upon unrestricted endowment than did the operation of the other schools and colleges.

In that period from 1937 to 1948, the student body increased from 200 to 375, tuition from \$400 to \$600, and fees from \$30 to \$50. In 1949-50, the student body jumped to 412, and a \$16 law library fee was added to the fees charged law students. The increase in enrollment to 459 for the current year, 1950-51, meant additional income from tuition and fees of \$29,000 over 1949-50. The budget for 1950-51 was \$165,600; the total income from tuition and fees \$307,000.

Beginning with 1951-52, the financial picture of the Law School will be substantially improved by the establishment of the White and Woodruff Professorships. These together with the previously created Cromwell Professorship will take care of the salary budget to the extent of \$30,000. This has made possible modest increases in all professorial salaries in budgeting for 1951-52. Notwithstanding the fact that these increases make the budget for 1951-52 appear as \$172,000 as against \$165,600 for 1950-51, when the income restricted for Law School use is subtracted from the total budget for these two years, the budgeted cost to be covered by tuition and fees is only \$145,700 for 1951-52 as against \$154,200 for 1950-51.

The principal needs of the Law School are (1) an improvement of the salary scale and an increase in the staff; (2) endowed scholarships; (3) endowment for the support of the law library; and (4) a Law School dormitory.

1. It was pointed out in the last annual report that the salary scale in the Law School was in 1950-51 approximately what it was in 1930. Only the increases budgeted for next year bring it above that level. Law School salaries, like those in other departments of the University, are far below what they are in the institutions which we count as our competitors. They are also

only one-third to one-quarter of what a desirable candidate for a Faculty position can obtain in practice. These facts were emphasized this spring when we were endeavoring to fill the vacancy caused by Professor Wilson's death. Since the reputation of every department of a university depends upon the caliber of its instructing staff, Cornell cannot afford mediocrity in any department.

Almost twenty years ago, the Law School introduced the innovation of problem courses for the instruction of third-year students in small groups and established the position of teaching fellow as an assistant in the conduct of these courses. Today, California, Chicago, Columbia, Harvard, Michigan, Stanford, and Yale employ groups of teaching fellows, but university economies compelled the abandonment of the position at Cornell. The doubling of the student body has necessitated an increase in the number of the problem courses, and there is now a critical need for two or more teaching fellows to maintain the effectiveness of this new type of law school instruction and to ensure the continuance of our policy of giving personal attention to the progress of students throughout the three years.

2. In the past fifteen years, tuition and fees have risen from a total of \$430 to \$700. The latter figure is higher than that of all other law schools except one. Only the existence of G.I. assistance for veterans has kept us, since the war, on an even competitive basis with other schools. Twenty years ago, with a student body of 200, it was found necessary to create 20 free tuition scholarships to supplement the few available cash scholarships. Today, with more than twice as many students, the number of cash scholarships is no greater, and the free tuition scholarships are only 10.

With the vanishing of G.I. benefits and with the raising of tuition and fees, many students of superior ability will not be able to attend Cornell, and we shall not meet the full measure of our obligation unless the higher cost of graduate legal education can be offset by a substantially increased scholarship fund. It is not unreasonable or without the support of experience to expect that 10 per cent of a student body is deserving of scholarship assistance. This would mean 45 scholarships for 450 students, or a sum of \$27,000 available annually. Failing that, it will probably become necessary to ask the Board of Trustees to increase the number of free tuition scholarships, which, of course, means a drop in tuition revenue.

3. It has been most difficult to obtain decent financial support for the law library. Prior to the war the annual library appropriation had gotten to \$14,000. War economies cut it back. For one year after the war, we brought it back to \$14,000 by securing authority to apply the \$4,000 profit on the Law School summer session for the purchase of books. The following year, a law library tax of \$16 was added to the total of fees charged law students. This yielded some \$6,500, but only \$4,000 was allocated to the library to maintain the appropriation at \$14,000. For the current year, 1950-51, though the tax yielded \$7,300, the appropriation was reduced to \$10,000 and then supplemented by \$3,900 taken from the accumulated income of the Sackett Fund, which had been dedicated to law school scholarships. The budget for 1951-52 carries \$15,000 for the purchase and repair of law books. The total inadequacy of this figure is shown by the fact that Columbia, Michigan, and Northwestern annually spend \$30,000 to \$35,000 on their law libraries, and the figures at Harvard and Yale are substantially higher than these. There is need for a law library endowment of at least \$500,000.

4. The crying need for a law student dormitory has been explained and emphasized in so many previous annual reports that a mere mention of it, without elaboration, should be sufficient at this time. New dormitories are needed for the University as a whole. With the postwar increase in the University's enrollment to 9,500, 50 per cent of that number are living off campus, some 400 of them in submarginal accommodations, and student housing in the Ithaca area has been taxed to its limit.

Law students do not live in fraternities or undergraduate dormitories. They are driven into private rooming houses in Ithaca and the surrounding country-



side. They lose the benefits of association and the special value to law students of informal discussion of their professional work and of world affairs. Nothing could add so much to the esprit of the student body and to the educational advantages of the Law School as the building of a law dormitory. As pointed out before, a suitable location would be on the slope west of Myron Taylor Hall between South Avenue and Cascadilla gorge and, so situated could be of economical design and construction.

#### ALUMNI

By a mail ballot, the alumni elected Randall J. Le Boeuf, Jr., LL.B. '20, president of the Law Alumni Association to succeed Alexander Pirnie, LL.B., '26. The Association held two meetings, a luncheon in New York City in conjunction with the annual meeting of the State Bar Association in January and a second two-day meeting in Ithaca in May.

During the past year, contributions totaling \$40,000 were received from alumni for Law School purposes. Most of this was designated as additions to the principal of the Woodruff and White Professorships. Those who have contributed annually to the Charles K. Burdick Scholarship added \$1,500 to that fund. "The Alumni Cooperative Group," headed by John S. Carter, LL.B. '33, and composed of alumni graduating during his years in the School, continued their annual gifts totaling \$1,000, which they permit to be devoted to a purpose determined by the dean. This sum was applied on the cost of printing a revised edition of our *Materials for the Introduction to the Study of Law* and will be recouped with a profit through the sale of these materials to successive first-year classes.

Mention has already been made of the contingent gift of a fourth professorship under the will of William G. McRoberts, '98.

Under the leadership of Messrs. Pirnie and Le Boeuf, the Law Association, with a substantial increase in membership, has enlarged its activities on behalf of the alumni and the Law School. The Alumni Fund Council has given the Law Alumni Association authority to solicit from graduates of the School contributions for Law School purposes. The Law Association is organizing to take advantage of this privilege.

#### FACULTY ACTIVITIES

During the summer of 1951, Professor Keffe will be visiting professor of law at the University of Virginia and Professor Schlesinger at the University of Utah.

Professor MacDonald was elected Faculty Representative on the University Board of Trustees for a term of five years. In the spring term of 1951, as acting professor of government, he gave a course in the College of Arts and Sciences at Cornell, and in the summer of 1951 he presided over a Conference on Juvenile Delinquency and Crime held at St. Lawrence University under the auspices of the New York State Department of Correction. At that conference, he also delivered five lectures on the philosophy of criminal law. He gave two lectures at the Albany Law School on "The Transition of the Growing Point of the Law," addressed the Legislative Aids Conference of the Council of State Governments, the New York State Bar Association's Committee on Corporation Law, the Committee on State Legislation of the Bar Association of the City of New York, the Erie County Bar Association, and a Joint Hearing of the Senate and Assembly Committees on Judiciary, Codes and Corporations. During the spring, he supervised the studies in American law, legislation, and bar organization of two Austrian lawyers sent to Cornell under the auspices of the State Department.

Professor Thompson, as a member of the Council of the American Association of University Professors participated in meetings held in Washington, Cincinnati, and Syracuse. He spoke on "American Legal Education at the Mid-Century" at the dinner of the Harvard Law School Class of 1912 in Washington and led a panel discussion on "Current Problems of Academic Freedom" before the Cornell Sociology and Anthropology Club.

Professor Schlesinger continued as a member of the Consultative Commission of the International Committee for Comparative Law, which functions as an activity of U.N.E.S.C.O., and of the American Bar Association's Committees on Comparative Civil Procedure and Practice and on European Law. He was appointed a member of the Association of American Law Schools Committee on Cooperation with Foreign Law Schools and a member of the International Panel of the American Arbitration Association.

Professor Larson is a member of the American Law Institute committee administering a program of continuing legal education for lawyers. In connection with his prospective leave of absence, he has received an award for research in England where he will be attached to the Faculty of the University of London.

Professor Willcox mediated four labor disputes and Professor MacDonald one. Professor Willcox participated in a panel discussing "Government Seizures in Labor Disputes" in New York University's fourth annual conference on labor.

Professor Keffe addressed the Federation of Bar Associations of Western New York at Jamestown and the Young Lawyers Section of the New York State Bar Association in Albany.

Professor Freeman is a member of the State Bar Association's Committee on the Revision of the New York Tax Law. He participated in the Quaker non-governmental representation to the United Nations and worked with the secretariat and delegations. He has been a member of the Faculty of three institutes of international relations in Baltimore, New York, and Syracuse and was elected president of the New York State Peace Council.

The following members of the Faculty served as research consultants for the New York State Law Revision Commission in initiating or completing studies and preparing memoranda as the foundation for legislation which would improve the law of the state: Professors Farnham, Larson, Schlesinger, Warren, and Whiteside.

#### FACULTY WRITINGS

1. *Published*: Schlesinger's *Cases and Materials on Comparative Law*. Freeman, MacDonald, Stevens and Sutherland, *Cases and Materials for the Introduction to the Study of Law* (revised edition). Schlesinger and Kaskell, *The Law of Cartels and Monopolies in the United States and in Germany* (published in Germany). Larson, *The Law of Workmen's Compensation*; Larson, *Problems and Materials on Agency and Employment* (4th ed. mimeographed); Larson, "The Welfare State and Workmen's Compensation," 5 *NACCA Law Journal* 18, and "The Future of Workmen's Compensation," 6 *NACAA Law Journal* 18. Keffe, "Uniform Code of Military Justice," *Reader's Digest*. Shannon, *Cases and Materials on Legal Accounting*. Freeman (as collaborator), The American Friends Service Committee's "Statement on American Foreign Policy."

2. *In preparation*: Robinson, second edition of *Admiralty Law*. Robinson, a text on international law for the practicing lawyer. Thompson, *Cases and Materials on the Law of Contracts*. Farnham, *Cases and Notes on American Land Law*. Willcox (as collaborator), *Cases and Materials on Labor Law*. Willcox and Sutherland, revision of *Cases on Commercial Transactions*. Shannon (as collaborator), *Cases and Materials on Business Law*. Keffe, a text on military law.

ROBERT S. STEVENS  
Dean of the Law School

## APPENDIX XII

## REPORT OF THE DEAN OF THE MEDICAL COLLEGE

*To the President of the University:*

SIR: I have the honor of presenting the following report of the Medical College for the academic year ended June 30, 1951.

On September 13, 1950, the opening exercises were held for a student body of 81 first-year (77 men, 4 women), 83 second-year (77 men, 6 women), 84 third-year (81 men, 3 women), and 87 fourth-year (76 men, 11 women) students. This total of 335 students is the largest class in many years. Dr. Stanhope Bayne-Jones, President of the Joint Administrative Board of the New York Hospital-Cornell Medical Center, gave the address of welcome, which was entitled "Freedom Inherent in Medicine and Physicians." The dean awarded scholarships to twenty-nine students.

On June 12, 1951, Commencement was held for 87 fourth-year (76 men, 11 women) students who were awarded the Doctor of Medicine degree by Acting President T. P. Wright. This graduating class included members from 22 states and from 48 different colleges and universities. Dr. William C. Menninger, a graduate of the Cornell University Medical College in the class of 1924, and father of Dr. Roy Menninger of the graduating class, addressed the group. The Hippocratic Oath was administered by Dr. N. Chandler Foot, Professor of Surgical Pathology, Emeritus.

## CHANGES IN STAFF

It is with real regret and sorrow that we note the passing of our late President and Chancellor, Edmund Ezra Day, on March 23, 1951, and that we report the passing of ten members of our staff here at the Medical College: On January 20, 1951, William DeWitt Andrus, Professor of Clinical Surgery; on December 4, 1950; Louis Atterbury Conner, Emeritus Professor of Clinical Medicine; on November 16, 1950, Robert William Hedges, Instructor in Obstetrics and Gynecology; on December 15, 1950, George J. Heuer, Emeritus Professor of Surgery; on March 31, 1951, Robert W. Hunt, Assistant Professor of Clinical Surgery; on March 31, 1951, William Logie Russell, Emeritus Professor of Psychiatry; on November 17, 1950, Ralph G. Stillman, Assistant Professor of Medicine (Clinical Pathology); on February 1, 1951, Hervey C. Williamson, Professor of Clinical Obstetrics and Gynecology; on December 20, 1950, George Gray Ward, Emeritus Professor of Obstetrics and Gynecology; and on July 1, 1950, George Woolsey, Emeritus Professor of Clinical Surgery.

Dr. Luigi Luzzatti, Assistant Professor of Clinical Pediatrics, submitted his resignation to take effect December 31, 1950, in order to accept a position in Oakland, California.

Dr. W. Clarke Wescoe, Assistant Professor of Pharmacology, resigned as of June 30, 1951, to accept an appointment as professor of pharmacology at the School of Medicine of the University of Kansas in Kansas City, Kansas.

On July 31, 1951, Dr. Robert Ball, Professor of Radiology, resigns to enter private practice in radiology in Baton Rouge, Louisiana.

Dr. Cranston W. Holman, Associate Professor of Clinical Surgery, was made director of our Bellevue Surgical Service, a position vacated by the passing of our late William DeW. Andrus.

On July 1, 1951, Dr. Connie M. Guion became Emeritus Professor of Clinical Medicine and Dr. George N. Papanicolaou, Emeritus Professor of Clinical Anatomy. We are fortunate that these two members of our staff will continue to serve the institution where they have contributed over so many years.

The following promotions for members of our staff have been made to take effect July 1, 1951:

Dr. Charles V. Morrill, Professor of Anatomy; Dr. Charles M. Berry, Asso-

ciate Professor of Anatomy; Dr. Henry D. Lauson, Associate Professor of Physiology; Dr. Anthony C. Cipollaro, Associate Professor of Clinical Medicine (Dermatology); Dr. Joseph C. Nathanson, Associate Professor of Clinical Obstetrics and Gynecology; Dr. Harold W. K. Dargeon, Associate Professor of Clinical Pediatrics; Dr. J. Louise Despert, Associate Professor of Clinical Psychiatry; Dr. Janet Travell, Associate Professor of Clinical Pharmacology; Dr. James J. Nickson, Associate Professor of Radiology; Dr. Ralph F. Phillips, Associate Professor of Radiology; Dr. Robert C. Sherman, Associate Professor of Radiology; Dr. Henry T. Randall, Associate Professor of Surgery; Dr. Henry J. Tagnon, Associate Professor of Clinical Medicine; Dr. Theodore W. Oppel, Associate Professor of Clinical Medicine; and Dr. Sidney Rothbard, Associate Professor of Medicine.

Dr. Randall comes to us from the College of Physicians and Surgeons of Columbia University where he has been assistant professor of surgery. He will take over the position of clinical director at the Memorial Hospital as of July 1, 1951.

#### STUDENT BODY

During this past year the Committee on Admissions has been enlarged from five to eight members and has been made up of Drs. Lawrence W. Hanlon, Chairman, Thomas P. Almy, William H. Dunn, Dayton J. Edwards, Edward J. Hehre, Alphonse E. Timpanelli, Wilson G. Smillie, and Preston A. Wade. The work of this committee is extremely time consuming, and we are indebted to its members for performing one of the most important functions in our institution.

A summary of the work of the Committee on Admissions in selecting students for entrance to Cornell University Medical College for September, 1951, is as follows: total applications received, 1,843; acceptances given, 121; students accepted for admission to first-year class, 86; for admission to second-year class, 2; for admission to third-year class, 4; women accepted for freshman class, 5; juniors accepted for freshman class, 6.

The 86 students accepted for the freshman class have had their undergraduate training at 43 different colleges or universities. Four of them have had part of their earlier education in foreign countries. These students are from 17 different states, and one is from Brazil.

Undergraduate colleges from which the largest numbers were accepted: Cornell, 17; Columbia, 6; Amherst, 5; Dartmouth, 5; Yale, 5; Harvard, 4. Six students were admitted to advanced standing. One or two students were accepted from each of 36 colleges or other universities. The distribution of home states of students is: New Jersey 18; New York 39 (N. Y. City 17); Connecticut, 6; Massachusetts, 1; Ohio, 2; Pennsylvania, 2; Illinois, 1; Colorado, 1; California, 5; Missouri, 2; Tennessee, 1; Virginia, 1; Maine, 2; Rhode Island, 2; Michigan, 1; Minnesota, 1; and 1 student from Brazil.

It is strikingly apparent that the greatest number of students is from New York State—39 (45 per cent); the second largest number from New Jersey—18 (21 per cent), and the third largest from Connecticut—6 (7 per cent). Thus, a total of 66 per cent of next year's entering class is from the states of New York and New Jersey.

It should be noted that the total applications for admission this year, 1,843, were considerably fewer than for last year, 2,986. The exact reasons are unknown, but three influences may have played some part: (1) an application fee of \$5 was charged for the first time this year; (2) the postwar peak of veterans graduating from colleges has passed; and (3) greater numbers of college students are entering the armed forces.

A look at the trend of applications over the past thirty years is instructive. In the early 1920's there were about 150 applications for admission each year. This increased fairly steadily to between 1,200 and 1,300 in the years 1942, 1943, and 1944. After dropping to 900 in 1945, it rose to a peak of 3,222 in 1949. This year the number of applications was in the neighborhood of the

figure which might have been expected had the gradual increase in applications from 1925 to 1945 continued uninterrupted until the present.

For some time we have been interested in getting together data on the geographical distribution of students in our classes as compared with other medical schools in this region (Columbia, Harvard, Rochester, Hopkins, and Yale). In the six schools 32.7 per cent of the students in the three classes come from New York State, and, leaving out Hopkins, which is somewhat removed and normally takes only five or six from New York, the percentage rises to 37 per cent. For the individual schools the figures are as follows: Columbia, 47.4 per cent; Cornell, 52.1 per cent; Harvard, 19.1 per cent; Hopkins, 6.3 per cent; Rochester, 45.2 per cent; and Yale, 24.4 per cent. From these figures it is evident that Cornell is the most strongly weighted with residents of New York State of any of these six schools. A study of one class at New York University, for example, shows 73 per cent from this state. We plan to follow this distribution carefully, because these observations might indicate an unfavorable trend on the part of our admissions policies.

The admissions practices of the Cornell University Medical College were investigated in July, 1950, by the administrator of the Education Practices Administration of the New York State Education Department. The investigation resulted from charges of discrimination because of religion made by the American Jewish Congress in behalf of an applicant from a near-by institution who was rejected. The administrator conducted a thorough, objective, and fair investigation and found no probable cause to credit the allegation of discrimination against the applicant because of religion.

In response to a request from the American Medical Association, Assistant Dean Hanlon canvassed our student body to determine whether there was a desire to organize a Student American Medical Association here. After submitting this question to our student body, Dr. Hanlon reported that his investigation had shown that our students here at Cornell are not interested in participation in such an organization.

At the opening of school last fall, twenty-nine students were awarded scholarships which totaled \$20,886.25. As the number of veterans continues to decrease, we anticipate a greater need for scholarships and loan aid.

During 1950, 52 interns, 115 residents, and about 55 fellows received graduate training in the clinical departments of our joint institution. In the New York Hospital, this group exceeds in number the undergraduates from our Medical College who are working at any one time in the wards and outpatient departments. This program represents an outstanding contribution to medical education and constitutes one of the most important activities of our center.

#### STUDENT HEALTH

During the past year, Dr. Fred Kern, Jr., has served as the director of personnel health services in our joint institution, and Dr. Richard McCormack has served as the student health physician. There has been no significant change in the organization or character of the service rendered by the Medical Student Health Service.

The Health Service Committee has considered plans for over-all improvement of the Health Service with particular reference to the problem of the care of students with emotional problems. No definite proposals were formulated.

The statistical data which do not differ greatly from those of previous years are: health visits, 3,005; number of students seen, 604; number of health calls and follow-up visits, 852; number of X-rays, not routine, 86; number of X-rays, routine, 658; number of physical examinations, 175; hospitalizations, 47; days of hospitalization, 332; referrals to out-patient clinics, 148; referrals to other consultants, 103; immunization visits, 1,400; tuberculin tests, 219; bacillus Calmette-Guerin vaccine, 5; tetanus toxoid, 208; typhoid vaccines, 214; Schick test, 89; diphtheria toxoid, 133; vaccinations, 86; readings, 446; total 4,405.



## DEPARTMENT OF ANATOMY

The teaching in the Department of Anatomy was carried out from September 14, 1950, until March 3, 1951. Dr. E. W. Lampe has held weekly sessions in surgical anatomy for members of the house staff and has continued his course in surgical anatomy for the third-year students. In the month of June he repeated the course for surgeons preparing for the surgical boards. We regret that Dr. Edward Salem, who has participated in the teaching and research in the department, has resigned to go to Sao Paulo, Brazil, where he will enter the private practice of orthopedic surgery and do some teaching in the medical college there. The research and teaching of the Department has been supported by grants from the Commonwealth Fund, the United States Public Health Service, C. V. Whitney, H. B. Close and members of his family, and by funds from the estate of the late Otto Sussman.

David Anderson is continuing work for his Doctor of Philosophy degree. We are pleased that Dr. Wilbur D. Hagamen is remaining as an Instructor in the Department of Anatomy and that he has been awarded a fellowship by the National Foundation for Infantile Paralysis this coming year. Dr. John MacLeod was awarded the annual prize given by the American Association of Urologists in May, 1951, for his work in human male fertility. He gave the prize essay at their meetings in Chicago. Likewise, he was honored as one of the members of the program at the opening session of the American Association of Anatomists in Detroit and was invited abroad to present a paper before the Society for the Study of Fertility held in Cambridge, England, in June, 1951. Dr. MacLeod has carried on a study in which he has analyzed the various characteristics of the human sperm in 1,000 cases of fertile men and in 1,000 cases of infertile marriage. The results of this study are particularly valuable because they point out those characteristics of the human sperm that are significant in determining whether specimens are fertile or infertile. A series of some nine papers have been published or are in preparation on the general topic of the male factor in fertility and infertility. Drs. Berry, Geohegan, Hagamen, and Hinsey and Mr. Anderson have carried on a series of studies on various central pathways in the nervous system including the central pathways of the afferent fibers in the vagus nerve, olfactory pathways, central visual pathways, and the ascending pathways activated by impulses entering the nervous system over the splanchnic nerves. Dr. C. V. Morrill has continued his work on the revision of *Regional Anatomy*.

Dr. Papanicolaou and his colleagues, Drs. Hanlon, Seybolt, and Koprowska have pushed ahead the work on the study of cytologic criteria of malignancy and on the use of the cytologic method in the diagnosis of cancer. During this past year, this laboratory has been enriched with valuable material brought by new applications of the cytologic methods to organs such as the colon, rectum, and breast. Much progress has been accomplished with the collaboration of Dr. William Cooper of the Department of Surgery through the use of the balloon technique for obtaining better gastric specimens. From year to year our knowledge of the specific cytology of the various body secretions has increased, and gradually the members of our staff are becoming more and more confident in recognizing some of the distinctive patterns which prevail in the early stages of malignancy. This applies chiefly to the preinvasion carcinomas of the cervix which are revealed by characteristic changes. The first section of the *Atlas*, which includes twenty-four color plates of Mr. Murayama's drawings, has been completed, and the proofs have already been corrected. The publication has been delayed because of the desire expressed by the director of publications of the Commonwealth Fund to include twelve other color plates of photomicrographs, which are now being prepared with the aid of Mr. Railey, our photographer. Special work is being conducted by other members of the staff. Dr. John Seybolt has been studying the use of mucolytic agents such as "Cariod" as a means of concentrating malignant cells in sputum specimens. Dr. Hanlon has conducted a study on the possibility of inducing tumors of the kidney in hamsters. Dr. Irena Koprowska, in cooperation with

Dr. Ralph Engle of the Department of Medicine, has been engaged in a comparative cytologic study of lymph node preparations stained with various techniques for the purpose of diagnosing metastatic carcinomas. Mrs. Doris Holmquist has been studying the chromosomal aberrations in cancer cells in search of new criteria for detecting malignancy. The good preservation and staining of cells which is effected in our preparations offers ample material for this study. She has also assisted in the preparation of the *Atlas*.

The two-week course in exfoliative cytology, which has been replaced by a three-month course, was given from March 5 to May 31. It was attended by nine physicians and fifteen technicians. Informal instruction has been continued in this laboratory for doctors as well as technicians during the whole year, with the exception of July and August. A total of thirty-four doctors and technicians have come for instruction for varying periods of time from a week to a year. The majority of the physicians studying here have come from foreign countries, and it is gratifying to see that most of them stay for several months to gain more complete knowledge of cytology. We have had two American Cancer Society fellows this year and at present are training a technician under the program for rehabilitation of disabled war veterans.

The diagnostic work has been continued along the same lines as in the past with most of the material coming from the New York Hospital and the Memorial Hospital and their clinics. Some material is also sent to us from Bellevue Hospital.

During the past year, Dr. Papanicolaou received the Lasker Award, which was presented at the American Public Health Association meetings in St. Louis, Missouri, on October 31, 1950. He and his co-workers have been called on for numerous lectures, radio addresses, and appearances in symposia. Dr. Seybolt attended the Fifth International Cancer Congress held in Paris, France, on July 17-21, 1950, and presented an exhibit there.

A sum total of twenty-four papers appeared from the Department of Anatomy during this past year.

Dr. Papanicolaou becomes Emeritus Professor of Clinical Anatomy on June 30, 1951. We are fortunate that he will continue his investigations in our Department and will serve as director of research in exfoliative cytology. Dr. John Seybolt will succeed him as director of the laboratory on exfoliative cytology. We are immensely proud of the contribution which Dr. Papanicolaou has made and look forward to his continued association with our institution.

#### BACTERIOLOGY AND IMMUNOLOGY

The teaching included the course given to the medical students, the course given to the student nurses, and the special studies assigned to graduate students.

The research activities were directed toward the following subjects: (1) influenza viruses; (2) bacterial interconversion of carbohydrates; (3) immunological properties of dextrans, particularly the partially hydrolyzed products now being tried as plasma substitutes; (4) immunological aspects of fungi, particularly *Torula histolytica*.

The field of influenza viruses was studied by Dr. John Sugg, with the support of a grant from the U.S. Public Health Service. The work dealt chiefly with the following two problems: (a) the mechanism involved in the acquisition of high virulence for mice by cultures of influenza virus that are originally nonpathogenic for the species; (b) cultivation of mixtures of different strains of influenza virus.

Bacterial interconversions of carbohydrates were studied by Dr. Edward Hehre and assistants; study was supported by a grant from the Corn Industries Research Foundation. In recognition of the results obtained during the past year, this foundation has given a grant of \$5,000 for the continuation of Dr. Hehre's work for the coming year. The two chief problems that are being studied are: (a) enzymatic conversion of dextrin to dextran and (b) microbial evidence for the structure of melezitose.

In addition to these two experimental fields of study, Dr. Hehre was one of the authorities invited to contribute to Volume XI of *Advances in Enzymology* published in 1951. The subject of his review was "Enzymic Synthesis of Polysaccharides: a Biological Type of Polymerization."

This department has been interested in various aspects of the general subjects of dextrans for over ten years. The interest began in 1939 in connection with the recurrence of serologically reactive substances in sugar, was then extended to the serological properties of purified dextrans, and was further extended by Dr. Hehre's studies on the enzymic agency and mechanism of dextran synthesis. Since 1939 a series of sixteen important publications have resulted from this field of work. During the past two years, more general interest in dextran has developed as a result of the clinical use of partially hydrolyzed dextrans as plasma extenders, and the possible wide use of these products in case of any disaster that would involve large numbers of people. A grant was made available by the U.S. Public Health Service, as a part of the National Blood Program, for the studies of Doctors Neill and Hehre. These studies have two general objectives: (a) the acquiring of more complete knowledge of the immunological properties both of the "native" dextrans which represent the starting material from which the partially hydrolyzed products are prepared, and also of the commercial products prepared for use as plasma substitutes; and (b) development of methods for detection of dextran-reactive antibodies. Continued studies have been made by Dr. Neill and Mr. Abrahams on the immunological aspects of fungi, particularly *Torula histolytica*. Dr. Hehre has participated to some extent in this work. The work was supported during the past year by grants from the Louis Livingston Seaman Fund and from the Hayt Foundation. The continuation of the work during the coming year will be made possible by a grant from the New York Hospital-Cornell Medical Center Research Fund. Further data on the serological interrelationships between various species of bacteria were accumulated. The point of emphasis, however, was an exploration of the possibility of applying the serological principles established during the past two years by work in this department to the practical study of materials such as spinal fluid from cases of human infection with *Torula histolytica*. The results obtained with materials from one case of torulosis strongly indicate the probability of successful practical application, but more work must be done before definite conclusions are justified. The problem, however, is a promising one and will be studied further during the coming year.

#### BIOCHEMISTRY

The change in our course in biochemistry which was made necessary by the change in curriculum initiated two years ago has continued to work out quite well. The concentration of the laboratory work in the third trimester is quite satisfactory from the student's point of view, as is evidenced by the response of this past first-year class. The following students are doing graduate work in this department: Samuel Gordon, Dr. William H. Horner, Edward Kuckinskas, Miss Rose Lubschez, Charles Otken, and Miss Claire Lawler. The postdoctoral fellows include Dr. Stuart Trippett from the University of Cambridge, England; Dr. Sterling P. Taylor, Jr., from Yale University School of Medicine; Dr. Edwin A. Popenoe from the University of Wisconsin; Dr. John M. Kinney and Dr. Laurance Goodwin from the Atomic Energy Commission; Dr. William J. Cathey from the University of Oregon; and Dr. Walter Verly who has held a fellowship from Belgium.

In addition to the loss of Dr. Cosmo Mackenzie, who left in July, 1950, to become head of the Department of Biochemistry in the University of Colorado School of Medicine, and of Dr. John E. Wilson who left in August to accept a position as assistant professor of biochemistry in the University of North Carolina Medical School, Dr. Robert Turner left in September to become associate professor of biochemistry in the Department of Chemistry and Chemical Engineering at the University of Massachusetts.

As in the past, the research work of the department continues to be diversi-

fied along several lines. Dr. Donald Melville has been making advances in his study on the chemistry and metabolism of the thiolimidazoles. He and his associates have synthesized radioactive thiolhistidine and are now in the midst of utilizing this in metabolic studies to see whether it is converted in the body to ergothioneine and to study the fate of the compound. Dr. Julian Rachele has continued directing his attention to the mechanism of conversion of methionine to cystine. He has been studying, also, the nature of the sulfur compounds other than cystine in the urine of a cystinuric dog. He has worked out satisfactory procedures for the determination of deuterium by the mass spectrometer and has perfected the methods for determining radioactive carbon. Likewise, he now is endeavoring to develop procedures for the determining of radioactive tritium. Dr. du Vigneaud and his group have continued work on the biological synthesis of labile methyl groups in relationship to the utilization of preformed methyl groups of the diet for transmethylation reactions in the body. They have also been studying methanol, formaldehyde, and formate as precursors in the neogenesis of labile methyl groups. Another field of interest to them has been the studies on the purification and nature of oxytocin and vasopressin, the oxytocic and the pressor principles, respectively, of the posterior lobe of the pituitary gland. They have demonstrated that a highly active oxytocic fraction appears to be a polypeptide made up of eight different amino acids and ammonia. They have now isolated the most potent preparation of pressor antidiuretic preparation that has been so far obtained. They have been able to show that it contains eight amino acids and ammonia. It is of great interest that six of these eight amino acids in the oxytocin preparation appear in the vasopressin preparation. It has been extremely difficult to obtain an adequate supply of the posterior pituitary glands. However, the Parke Davis Company has placed at the disposal of this department additional supplies of material which make possible the continuation of their work. The work in this department has had splendid support from the Lederle Laboratories Division of the American Cyanamid Company.

Ten publications have appeared from this Department during the year. Professor du Vigneaud has delivered five lectures before different societies over the country and was elected president of the Society of Biological Chemists in May, 1951.

#### LIBRARY

The rising spiral of increasing costs touches the library at many points. In spite of added expense of publishing, much of which comes back to us in increased bills, there is no slackening of publication. New titles are added every day, and it is hard to know where to draw the line on the growing series of annual reviews, yearbooks, recent advances, progress in many fields, to say nothing of transactions, proceedings, symposia, and conferences. We now have a dozen or more sets of such material which meet with much use and are in great favor. In the past year we have added four new journals. Few journals have ceased publication; only six foreign journals have combined forces to make three. We have carefully considered the list of subscriptions and have decided to continue all in view of the fact that we now have long complete sets of many journals of former importance but now of doubtful value. We have over 600 titles, over half of which are paid subscriptions (153 American and 190 foreign journals).

It is increasingly difficult to secure adequately trained help in the light of the demand made by the government and commercial libraries. These organizations are able to pay higher salaries to the graduates of library schools who come out with no experience and ask for top salaries. Our staff includes only three full-time persons supplemented by student help for evenings, Saturday afternoons, and Sundays. Therefore, we can do only the most important routine work. The hours have been 79 per week during the school year, 60 hours during the summer, and 43 hours during the brief intervals when all students are away. It is obvious that there is too little supervision, and we sometimes wonder why the losses have not been more frequent and annoying. Steps have



been taken to augment the financial support of our library which, during the past several years has been insufficient. The increased demands by the members of the staff of the Memorial Center in addition to those in our own joint institution present problems requiring solution. Our librarian, Mrs. Nichols, has done a remarkable job in the face of the many difficulties with which she has had to contend.

The librarian gave the usual course of instruction to the first-year class. Upon the initiative of Dr. Almy, Chairman of the Library Committee, plans are being made to extend this training to new members of the house staff as they enter our institution. The Library Committee is now arranging for a systematic evaluation of books in various categories with the hope that they can maintain a proper balance in the various fields of medical science and clinical medicine.

The Medical Library Association Exchange has been active. We have sent out no material through this organization since May, 1950, but expect to have a list ready in the fall. We have received material through the Exchange from 48 libraries, 4 bound volumes and 202 unbound numbers, which helped fill gaps in back files. During the past year we have added 767 volumes; 425 newly bound journals; 4 exchange journals; 121 purchases; 217 gifts, including 24 volumes of important historical books from Dr. James Neill. Our total volumes are well over 41,000, and we are having a recount made to bring this count up to date. Older volumes are being sent to lower stacks to make room for books that have greater use. Many second unbound sets of journals are now being used. About thirty titles of much-used journals are now available and extend their use.

From July 1, 1950, to June 9, 1951, there were 23,286 readers, slightly less than last year. Some 7,680 persons borrowed 10,675 books for use outside the library. Interlibrary loans continue to grow, and this year the total was 231. We borrowed from others on interlibrary loan 51 volumes, the larger part from Rockefeller Institute.

#### MEDICINE

Dr. Connie M. Guion was awarded the honorary degree of Doctor of Science by Wellesley College and was appointed a member of the Board of Overseers of Sweet Briar College. Friends and alumnae founded an endowment scholarship fund in her honor. She received the Award of Distinction of the Cornell University Medical College Alumni Association. Dr. Ephraim Shorr received the Alvarenga Prize of the College of Physicians of Philadelphia for his work on shock. He was asked during the year to give the Brickner Memorial Lecture at the Hospital for Joint Diseases, the Henry B. Freiberg Memorial Lecture in Cincinnati, and the Eastman Memorial Lecture at the University of Rochester. Dr. Harold G. Wolff was editor of the Proceedings of the Association for Research in Nervous and Mental diseases and was elected president of the New York Neurological Society. He was invited to deliver the Hertzstein Lectures in San Francisco and, by the Nobel Institute for Neurophysiology, to lecture in Sweden at the Universities of Lund and Upsala and at the Karolinska Institute in Stockholm.

*Consultation Clinic.* To serve physicians of the community and to aid them in the solution of difficult problems among patients who cannot pay the full cost of diagnostic examination, a clinic has been established in the Out-Patient Department under the direction of Dr. Claude E. Forkner. Only patients who are referred by their physicians are received in this facility. Examinations are searching, consultations with necessary specialists are convenient, and prompt reports to the referring physicians are stressed. It is hoped that in its growth, the clinic will aid materially in the establishment of closer relationships between the Center and practitioners of the community.

*Vincent Astor Diagnostic Service.* This service was established by members of the staff to accommodate patients who are able to pay full cost of examination, who do not require hospitalization, and who find it convenient to obtain necessary diagnostic tests without complete interruption of their occupations.



It provides a facility where physicians of the community may find aid in the solution of difficult diagnostic problems and convenient arrangements for consultation with members of the staff. It was officially opened on January 3, 1950, and during the year received approximately 1,093 new patients. It has also arranged for 22,466 ancillary services for private patients of staff members and has provided space for members of the staff to see 862 of their own private patients.

*Medicine A Clinic.* This clinic in the Department of Medicine has continued its experiment in a more comprehensive form of diagnosis and treatment. Over the more than four-year period of its operation, approximately 2,000 patients have been seen by 19 physicians, most of whom have been fellows of the Commonwealth Fund. The first objective of the project has been approximately achieved, namely to ascertain whether or not patients whose difficulties arise in the setting of stressful life situations can be managed successfully in an out-patient department by properly qualified internists. This year an attempt has been made to assess in a more definite way the effectiveness of treatment and to establish so far as possible prognostic criteria. This enterprise has already contributed significantly in the shaping of modern concepts in medicine. Disease is being considered more in terms of the host's adaptive processes to assaults of environment rather than damage done by the hostile forces themselves. Since the human organism has a limited number of ways in which it can react, almost identical adaptive processes may be set up in response to a variety of threats. Such reactions, at first essentially functional, may themselves lead to tissue damage and structural abnormalities when they have been unduly sustained or severe. Finally the studies have indicated that processes of disease may be initiated by stresses arising from personal adjustments to life situations as truly as from the stresses of burns, injuries, or parasitic invaders.

*Social and Cultural Anthropology.* In cooperation with the Russell Sage Foundation a project was started at the New York Hospital-Cornell Medical Center a year and a half ago to promote studies in the application of social studies to problems of medical and nursing practice. Dr. Leo W. Simmons, Professor of Cultural Anthropology at Yale University, has the title of Visiting Professor of Anthropology in Medicine at Cornell and has been in charge of the project in collaboration with the group in the Medicine A Clinic. Possibilities have been explored during the past year for a broader and more integrated concept of the effects of cultural, social, and psychological factors upon sickness and health. Studies have been planned and to some extent initiated concerning the influence of patient-physician, patient-nurse, patient-family, and other interpersonal relationships in the presence of disease and as observable in a great general metropolitan hospital. The over-all purpose of the program is to provide flexible and favorable opportunity for physicians and nurses to join with social scientists in studies concerning optimal management of disease.

*Rehabilitation Clinic.* As an aftermath of the poliomyelitis epidemic of 1949, and as a part of the service during 1950, a clinic for the aftercare of infantile paralysis was established through the combined efforts of orthopedists, physiotherapists, internists, and social service workers. This has formed a nucleus for an Interdepartmental Rehabilitation Conference in which problems of convalescence and rehabilitation of patients of all hospital services may be discussed.

*Adrenocorticotrophic Hormone (ACTH) and Cortisone.* The interest in these two potent remedies continued unabated throughout the year and resulted in many studies and significant contributions. In the research unit in arthritis conducted by Dr. Richard H. Freyberg in association with the section of rheumatic disease at the Hospital for Special Surgery, studies have indicated that in patients with rheumatoid arthritis and spondylitis, cortisone given by mouth has all the physiological effects that can be observed when it is administered intramuscularly. Another investigation now in progress, fostered both by Dr. Russell Cecil and Dr. Freyberg, concerns an evaluation of the effectiveness of gold salts to sustain benefits produced by short courses of cortisone therapy.

Studies were also undertaken by Dr. Robert F. Watson and Dr. George C. Reader on the mechanism of ACTH action in the experimental arthritis induced in guinea pigs by the use of heterologous antiorgan serum plus adjuvants. It is hoped that this will afford a means of illuminating possible hypersensitization responses in rheumatic fever. A large-scale investigation of the effects of ACTH and cortisone in tuberculosis of animals and man is in progress in the subdepartment of chemotherapy. It has already been found that these hormones have the capacity to abolish the symptoms of tubercular illness for a short period, and it is believed that detailed study of the phenomenon may increase understanding of a dread disease.

In allergic conditions, the mechanism of ACTH action is being explored in two ways. The allergic patient under ACTH therapy is being studied by eye, skin, and serological tests, thus approaching a correlation between increase in tolerance of the tissues with the state of the serum antibodies. At the same time the nonallergic patient under ACTH therapy is being tested by means of passive transfer tests with standard irradiated ragweed sensitizing serum. It is hoped by these observations to contribute to knowledge as to the operative site of the hormone. These studies have been conducted by Dr. Mary Loveless in association with Dr. Horace Baldwin, who simultaneously has been observing the effect of the hormones in patients suffering from the more acute allergic states. Dr. Mary Loveless has continued her observations on the use of adjuvants in pollen therapy. She has made interesting studies of the anaphylaxis induced by the stings of yellow-jackets and has made important advances in the long-term project of fractionation of ragweed pollen.

*Angiocardigraph and Vascular Catheterization.* Dr. Charles T. Dotter and Dr. Israel Steinberg have continued their angiocardigraphic studies in the Department of Radiology and in close association with the Departments of Medicine and Pediatrics and Surgery. This work has been integrated with a program of vascular catheterization and functional circulatory and respiratory studies under the direction of Dr. Daniel S. Lukas of the Department of Medicine. The combined project has been of great assistance in the development of surgical procedures as well as clinical studies of the heart and lungs. Drs. Dotter and Steinberg have completed the manuscript of a monograph on the subject of clinical angiocardigraphy.

*Chemotherapy.* Because of the illness of Dr. Walsh McDermott this subdivision of the Department of Medicine has been conducted during most of the year by Dr. Ralph Tompsett. As before, both the laboratories and clinical facilities of the division have been used for testing a wide variety of chemotherapeutic agents. Investigation of the action of aureomycin and chloramphenicol has been continued. In December, 1949, studies in the laboratories of Charles Pfizer and Company on the antimicrobial activity of a new drug, terramycin, were completed, and the first cautious clinical trials with the material were then started at the New York Hospital-Cornell Medical Center. Clinical tests at the New York Hospital and the Second (Cornell) Medical Division at Bellevue Hospital have demonstrated its effectiveness in pneumococcal pneumonia and have indicated possible usefulness in other pulmonary infections.

Observations on the action of a variety of antituberculosis agents, when used singly or in combination, have been pursued throughout the year. Studies of the relation of size and duration of dosage of dihydrostreptomycin to the development of deafness were continued. Evaluation of the combined treatment with dihydrostreptomycin and paraaminosalicylic acid (PAS) of the American Cyanamid Company was attempted. Extensive investigation of the pharmacology, clinical toxicity, and therapeutic effectiveness of viomycin, a drug introduced in the latter part of 1949 by the Pfizer Research Laboratories, was conducted throughout the year. Although the results of clinical application at this time are inconclusive, it has been established that viomycin may be given to tuberculosis patients in theoretically adequate dosages for long periods of time and that the evidences of toxicity which are encountered are not of such a nature as to preclude its use. Its relative value as an antituberculosis agent has not yet been determined. When the practical significance of the control of

tuberculosis is considered, these observations become impressive. It is gratifying that the New York Hospital-Cornell Center is participating preeminently in an effort to control one of the greatest scourges and that many of the most significant observations on new and hopeful remedies are being made in this Center.

A generous two-year grant from the Charles Pfizer Laboratories made possible the establishment of a laboratory for the study of infections in the Cornell Division of Bellevue Hospital. Space for the new laboratories and the cost of their construction were arranged by the late William Andrus. Dr. Vernon Knight was appointed to direct this new and hopeful enterprise in which Drs. Alphonse Timpanelli and Oscar Goldstein also devote a portion of their time.

Among the innovations was the establishment of a new *Safety Laboratory* in quarters previously assigned to the chemotherapeutic division. Awakened interest in tuberculosis research and the improvement in methods for culturing tubercle bacilli have resulted in an enormous increase in the number of viable pathogenic organisms handled by laboratory investigators. Despite orthodox precautions several infections, presumably contracted during laboratory research on tuberculosis, have been recorded. This situation, when brought to the attention of the U.S. Public Health Service authorities, led to an investigation and a program of correction. As one aspect of their project, a supplemental grant was made to the Department of Medicine for the purpose of setting up a model safety laboratory and animal room. These have been constructed and equipped during the year and will serve not only as admirable facilities but also as a testing ground for safety devices as they are developed.

*Gastroenterology.* Dr. Thomas P. Almy and his associates have continued a systematic program for the evaluation of simple psychotherapy in the management of duodenal ulcer. By developing a method of recording the movements of the lower intestine, they have opened the way for studies of the relationship of the autonomic nervous system to intestinal disease and of the effects induced by antispasmodic drugs.

*Hematology.* The action of inorganic arsenicals in leukemia of mice is being studied by Dr. Paul Reznikoff and his associates. Dr. Ralph Engle in association with Dr. Irena Koprowska of the Department of Anatomy is examining touch preparations of lymph nodes obtained from biopsy specimens. The purpose of this study is to correlate the appearance of the cells when stained in the usual manner with that produced with the stains of Dr. George Papanicolaou of the Department of Anatomy.

*Metabolism and Endocrinology.* This subdepartment, under the direction of Dr. Ephraim Shorr, has been the recipient of special funds in large amounts, and it is impossible to offer more than a summary of the various and extensive achievements of the past year. Previous work carried out with Drs. Benjamin Zweifach, Abraham Mazur, and Silvio Baez had demonstrated the presence in the circulating blood of an hepatic vasodepressor material (ferritin) and a renal vasoexcitor material in a wide variety of circulatory disturbances in animals and man. Large amounts of ferritin had been shown in conditions characterized by edema. Both substances had been found in experimental renal hypertension in animals and essential hypertension in man. During 1950, the participation of the hepatic and renal substances has been studied in a variety of hypertensive states, in eclampsia, in cirrhosis of the liver, lipid nephrosis, congestive heart failure, and other conditions which are characterized by edema. Factors regulating the renal vasoexcitor mechanism have been explored, and the importance of oxygen tension, adrenal cortical function, and adequate supply of protein and ascorbic acid has been confirmed. The antidiuretic action of ferritin has been shown to be dependent upon an intact posterior lobe of the pituitary gland. Extensive chemical studies of ferritin and apoferritin have disclosed the dependence of their vasodepressor and antidiuretic activity upon the protein as well as the sulfhydryl groups of the molecule. An entirely new study has demonstrated the usefulness of tetrazolium salts in estimating the functional state of the proximal convoluted tubules in experimental and clinical hypertension. Dr. Richard Lee has been studying the bulbar conjunctival capillaries in hypertensive and normal subjects and has demon-

strated structural changes in these vessels as well as changes in sensitivity to topical epinephrine which parallel those previously observed in the capillary bed of the mesentery in dogs and rats with experimental hypertension. Experiments on traumatic hemorrhagic shock have been continued with particular emphasis on the capacity to develop resistance to shock through certain training procedures. Resistance was found to be associated with the build-up in the liver of the system concerned with the inactivation of the liver vasodepressor, ferritin. The studies on the effect of strontium salts in the metabolism of bone have been continued with demonstration of the practical utility of using strontium in several conditions in which demineralization of the skeleton or abnormality of the amount or distribution of calcium is a feature. The mechanisms regulating calcium and strontium deposit have been explored.

*Peripheral Vascular Disease.* This well-equipped laboratory under the direction of Dr. Irving S. Wright continues to act as the center for the Committee on Anticoagulants of the American Heart Association. It has also served as a training station for the training of workers for the U.S. Public Health Service to aid them in establishing teaching centers for prothrombin and clotting time tests. Investigation of blood coagulation and anticoagulants has been focused this year on the properties of tromexan, a drug closely related chemically to dicumarol.

*Poliomyelitis.* Under grant from the National Foundation for Infantile Paralysis, Dr. G. Donald Whedon and others have continued their studies on metabolic aspects of convalescence following acute poliomyelitis. These have included observations on nitrogen and calcium balance, ventilatory function, and muscle circulation.

*Rheumatic Fever.* Studies of rheumatic fever, quite separate from those relating to the therapeutic effect of ACTH and cortisone, have been pursued in the Departments of Medicine and Pediatrics. Observation and medical supervision of adults, as well as children in families in which rheumatic fever has occurred, have been continued, and more important data regarding the concept of recessive inheritance of the disease have been accumulated. Newer studies have consisted of biochemical investigations which may shed light on the susceptibility to rheumatic fever and have included qualitative and quantitative observations of steroid excretion, chromatographic study of amino acids, comparison of blood sedimentation rates and circulating eosinophils as indices of rheumatic activity, and metabolic responses to ACTH in normal as well as rheumatic children. In the Department of Medicine work on the antigenicity and serological specificity of collagen has been continued by Dr. Robert Watson and his associates. This extraordinarily difficult problem has been approached with the aid of the electronmicroscope in collaboration with Dr. Parker Vanamee of the Rockefeller Institute and chemically with samples of the enzyme collagenase. Among other studies on rheumatic diseases, Dr. Richard H. Freyberg has conducted trials of a new analgesic phenylcinchoninic acid which has been suggested elsewhere as an improvement over salicylates and other widely accepted analgesics. They were able to demonstrate its potency in the relief of pain but also encountered certain irritative features which rendered it impractical for general clinical use.

Among the foundations and institutions supporting research in the Department of Medicine are: the American Cancer Society; the Commonwealth Fund; the Berlin Allergy Fund; Eaton Laboratories; Eli Lilly & Company; the Helen Hay Whitney Foundation; Hoffman-Laroche, Inc.; the Josiah Macy, Jr., Foundation; the Lederle Laboratories; the New York Heart Association; the Nutrition Foundation; Charles Pfizer & Company; the Playtex Park Research Institute; the Russell Sage Foundation; E. R. Squibb & Sons; the U.S. Public Health Service; and the Veterans Administration.

In 1950, as before, physicians from many parts of the United States and numerous foreign countries visited this Department, attended its conferences and remained as observers for periods varying from a few days to many months. Nations represented included Australia, Canada, Ceylon, England, Finland, Germany, India, Israel, Japan, Java, Norway, Portugal, Sweden, Switzerland,



Thailand, and Turkey. In addition, graduate students of the Cornell University Medical College working in the Second (Cornell) Medical Division at Bellevue Hospital attended departmental conferences. Increasingly more physicians from the metropolitan area are being encouraged to participate in the teaching exercises of the Center, a much-desired trend which has been stimulated by the clinics for practitioners.

#### MILITARY MEDICINE

The Department of Military Medicine continued to function under existing regulations as Detachment No. 9 ROTC Instructor Group, 1242d Area Service Unit under Headquarters, New York Military District. There was no change in operating personnel, and Lt. Colonel Urban L. Throm, II, served as professor of military science and tactics.

The curriculum consisted of a one-hour period of instruction weekly over the course of thirty-two weeks for each of the four classes of the school. The subject matter followed with minor exceptions the subject schedule and time allocations prescribed in current Army directives. In keeping with the co-sponsorship of ROTC by the Army and the Air Force, the amount of time devoted to topics primarily of interest to the Air Force was increased this year.

The mechanisms of instruction included lecture and conference usually illustrated by blackboard, charts, slides, film strips, or motion pictures. In addition the coach and pupil method was employed for bandaging and map reading. Six guest lecturers took over topics in which their backgrounds made them unusually well prepared. A comprehensive final examination covering the material presented during the year was taken by each class.

Enrollment by class at the completion of the scholastic year is as follows: first-year basic course, 7; second-year basic course, 13; first-year advanced course, 9; second-year advanced course, 15. This total of forty-four students represents a decrease of three from the number one year ago. One sophomore student was dropped at his own request, one junior student discharged for lack of interest, and there was one death in this class. Great difficulty was experienced in trying to interest the freshman class members in joining the ROTC, and this was felt to be a direct result of the international situation.

During the summer of 1950 four junior students from this unit who were veterans of World War II attended the clinical clerkship type of camp for six weeks at Walter Reed Army Hospital, Washington, D.C. They were visited by Dr. Lawrence W. Hanlon, Assistant Dean. Two junior students who were nonveterans attended the six-week camp at the Medical Field Service School, Fort Sam Houston, Texas. It is anticipated that fourteen students will attend summer camps during the summer of 1951.

Of this year's graduating class twelve members received commissions as First Lieutenants, seven in the U.S. Army Reserve, five in the U.S. Air Force Reserve, and by special arrangement one will be commissioned as a Lieutenant, junior grade, in the U.S. Navy Reserve. The remaining two individuals who have completed the course have declined to accept commissions for personal reasons.

The annual ROTC inspection was conducted by a medical corps officer from New York-New Jersey Subarea in April, 1951. The report of this comprehensive inspection of the unit was entirely favorable. Once again it was recommended to the inspectors that the scope of the ROTC program be modified so as to include those who are interested in commissions in the Department of the Navy, and thus the course would be renamed "Armed Forces Medical ROTC." It is understood that this proposal has been under consideration at the top level for some time.

#### DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

Of interest to friends of the University was the retirement on June 30, 1950, of Dr. James A. Harrar, Professor Emeritus of Obstetrics and Gynecology at Cornell University Medical College and Consulting Obstetrician and Gynecolo-



gist to the Hospital, after some 45 years of service to the Lying-In Hospital. In commemoration of this occasion, a dinner was given in his honor by the attending staff at the University Club in this city. Dr. Harrar is the author of "The History of the Lying-In Hospital in the City of New York," which was presented on the occasion of the annual Alumni Day dinner in 1938 and which was published later in the same year.

*Statistics.* The total number of patients discharged during the year 1950 was 10,800 as compared to 10,536 during 1949. The number of obstetrical patients cared for was only slightly increased (approximately 2 per cent) as compared to 1949. This increase is particularly significant in view of the general decrease in the total number of births occurring in the city. The actual number of babies born in the Hospital during the year was 3,926, which is 70 more than were delivered during the previous year. There were two maternal deaths, one due to heart disease and the other caused by recurrent malignant neoplastic disease. From January, 1949, to July, 1950, no maternal deaths occurred, during which time approximately 6,000 women were delivered. The total infant mortality (stillborn and neonatal deaths) during the past year was 1.7 per cent of the total number of babies delivered, the lowest rate achieved in the history of the Lying-In Hospital. There were more survivals of immature infants (birth weight less than 3.3 pounds) this year than in previous years. It is apparent from these facts that obstetrical patients can now be cared for without mortality resulting primarily from the process of pregnancy or parturition, except in the rarest circumstances. There may continue to be occasional fatal accidents, but what was considered an irreducible minimum in this respect a decade ago has been reduced materially today. A new challenge, i.e., that survival alone should not be our only criterion of end results achieved, has also been emphasized. The importance of psychological and sociological problems and how they are being dealt with will be discussed later.

The number of gynecological patients seen in the Out-Patient Department and admitted to our pavilions increased appreciably this year, approximately 7 per cent more than in 1949. Likewise, the number of operations performed increased. Gynecological patients discharged during the year 1950 numbered 2,050 as compared to 1,923 in 1949. Of these, 91.6 per cent required surgical treatment. Nine of the ten deaths occurring on this service were in-patients suffering from malignant neoplastic diseases. Approximately 1,700 more days of adult patient care were rendered in 1950 than in 1949—55,884 as contrasted to 54,151. The occupancy rate for the year among the various services was as follows: private, 73.0 per cent; semiprivate, 76.3 per cent; pavilion, 73.8 per cent. During the year better distribution among the services was achieved. The percentage of occupancy reflects the improvement made in patient care during the past decade. Twice as many operations were performed in 1950 as in 1940. In 1950 more than 50 per cent of all the operations were classified as major procedures, while in 1940, less than 40 per cent were so classified. Likewise, almost 1,000 more babies were delivered in the Hospital in 1950 than in 1940. Yet in 1940 almost 3,000 more days of care were required to provide adequate service to a lesser number of patients. This progress has enabled the Lying-In Hospital to expand greatly its services without increase in its facilities.

While the care of such a large number of patients is not overtaxing our beds, it indicates a greater utilization of the ancillary services as well as of the operating and delivery rooms. The bacteriological, pathological, and chemical laboratories in this department all showed a significant increase in the number of determinations and examinations done this year as compared to any previous year. It is interesting that there were well over 300 determinations of both sodium and potassium blood levels, tests not previously done in our laboratories. The operating rooms were used more effectively, since changes in technics and procedures were established which resulted in a decrease in time necessary between operations. Under present conditions it may be concluded that the operating rooms are being used at near or full capacity.

*Policies.* The program of providing courses for expectant mothers in "preparation for labor" has continued with enthusiasm on the part of the patients,

nursing service, and medical staff. In 1950 223 patients availed themselves of this service as compared to only 28 in 1949. The necessity for a new full-time instructor for this purpose became apparent by the middle of the year. Such a person has now been engaged and is at present working on the staff. The enrollment of patients for this course is greater now than at any time heretofore. In addition to group instruction in relaxation exercises, the fundamentals concerning the physiology of pregnancy and parturition, using modern methods of instruction, are taught to antenatal patients. Tours are conducted to permit these patients to see the pavilions, nurseries, and labor and delivery rooms. These have been found most helpful in allaying the fear and apprehension which the patients usually have at the time of admission to the labor room. Every effort has been made to have nurses, trained in the principles of this technic, in constant attendance with the expectant mother during the hours of active labor.

In 1949, only 218 patients availed themselves of the "rooming" plan, while in 1950 the figure increased to 517. In other words, over 13 per cent of all maternity patients availed themselves of this plan in 1950. The value placed on this service by our patients is attested to by the many enthusiastic letters received from participants in the plan. Under this arrangement the mother and her newborn are cared for in the same unit. Practically all of our patients appear to prefer the modified plan whereby the infants are returned to the nurseries for the night at about 10 p.m. Participants in this scheme may learn the principles and many details of infant care by observation and practice. It is possible in the multiple bed units (two to four) to share and compare experiences with other mothers. Many additional psychological reasons have been advanced to justify this method. It is Dr. Douglas' impression that the service is most useful and in the future might be requested by 20 to 50 per cent of our patients. Up to the present time, no structural changes or additions in the way of equipment have been made. There has been no essential change in the amount of nursing service required. It does provide a greatly broadened opportunity, however, for nurses to teach mothers and to acquire, by observation, knowledge pertaining to personality and its development. This greatly increases the value of nursing time that is devoted to the care of the patient from an educational point of view. It also provides teaching opportunities for nurses, not previously available. It is hoped that it will be possible to offer this service to most of the patients as the years progress, but it is not proposed to coerce patients into the scheme but rather to leave it on an entirely optional basis.

Early ambulation following delivery and operation has continued, and along with the use of chemo-antibiotic therapy has made it possible for patients to leave the hospital earlier than heretofore. Our experience indicates that the postpartum and postoperative hospitalization period is more pleasant and associated with less discomfort and fewer complications when patients are not confined to bed for the major portion of their hospital stay. Of special interest is the incidence of thrombophlebitis. A study conducted during the year revealed that approximately the same number of patients had this complication during recent years, but there was a great difference in the severity of the disease. The recent cases were mild, often without morbidity, and in many instances the condition was not sufficiently severe to increase appreciably the period of hospitalization. At the same time, as far as can be determined, no ill effects from early ambulation, even after the lapse of several years, have been observed. The plan contributes to the increased use of hospital beds as compared to a decade ago.

A committee has been appointed to plan and make recommendations to broaden and improve our service to patients with infertility. In addition to consideration of the gynecological and urological problems, the environmental, anthropologic, psychological, and psychiatric implications are being explored. It is hoped that the necessary funds will be available to implement the final plan when it is proposed.

The policy of intensive use of external radiation and extensive surgery in neoplastic disease has continued. The use of radium has been curtailed further,

and results appear to support the plan in general. More patients with advanced disease have been hospitalized to evaluate the possibilities of radical surgery, to institute palliative measures, and to study the late stages of these diseases.

A new conference, held once weekly, has been initiated. At this conference pathological material accumulated during the week is described and presented for discussion before the resident staff members, the senior medical students, visitors, and some members of our attending staff. The use of new visual aid equipment helps to make these conferences of particular educational value.

*Research.* A survey of the level of sodium and potassium in the sera of pregnant women at various stages of gestation and in the presence of various complications has been started. In general, it appears that the levels are not altered materially during pregnancy. Some preliminary observations indicate a moderate reduction of the sodium content early in labor. Sodium and potassium determinations have been very helpful as a guide in maintaining normal osmolarity in some complications of pregnancy and in those gynecological patients who have undergone extensive surgery.

A study of the circulating leukocytes during pregnancy and labor has been completed, and the report has been accepted for publication. Additional studies on kidney function in normal pregnancy have been carried out. Reports on some of this material will be ready for publication during the coming year.

A generous grant from the Florida Citrus Commission was received in December to aid in a study of the causes of spontaneous abortion. Several studies pertaining to various aspects of abortion are already in progress. Also, investigations pertaining to neoplastic disease of the genital tract have been initiated. These researches, for the most part, are concerned with histopathological studies, while others deal with the classification of various tumors based on anatomical and clinical observations.

A study with respect to the functional capacity of the heart during pregnancy is in progress. Our experiences and findings in cases of myocarditis and coronary artery disease complicating pregnancy are being subjected to critical review at this time.

Some preliminary studies carried out on the metabolism of the endometrium indicated the feasibility of using micro-Warburg vessels in carrying out the technic on small amounts of tissue. Funds have been made available by the Medical Center Research Fund to permit additional research on a more extensive scale.

Dr. Leo W. Simmons, Visiting Professor of Anthropology in Medicine, has been interested in several sociological problems pertaining to our patients. One study concerning the problem of the unwed mother is being carried on by Roy H. Dickerson under Dr. Simmons' direction.

The joint undertaking with the subdepartment of ophthalmology pertaining to changes in the eyegrounds of normal patients and those with toxemia and other forms of hypertension during pregnancy has been completed, and the data have been compiled. Several papers are in the process of preparation at this time, and both diagnostic and prognostic aids acquired as a result of these studies are being employed in our daily practice to the benefit of the patient.

Plans for the measurement of pain in the nongravid human uterus have been completed, and clinical observations will be started in the near future. As in the case of pain studies during labor they will be carried out as a joint project with the Department of Physiology.

A modified operative procedure for the relief of urinary incontinence has been devised and carried out during the year. It involves application of the vesical neck in conjunction with the supra-pubic cystopexy (urethral and vesical suspension) previously reported from this department by Drs. Andrew Marchetti and Victor Marshall.

*Staff.* Most of the members of the resident staff have a statistical or clinical problem under investigation. The unsettled state of world affairs interferes with the continuation of studies by these individuals. Uncertainties are disturbing and hinder the progress of studies. Some investigations necessarily

had to be dropped when the residents concerned left for duty with the armed forces.

The demands of the armed forces already have necessitated the resignation of four of our younger staff members. It is anticipated that several more will be called. It may not be possible to fill these positions with candidates of the same caliber. Readjustments in schedules accordingly have been necessary, while some of our educational plans have been curtailed and modified. Every effort will be made to maintain adequate care for the patients.

Dr. Kermit Krantz, who was awarded the Foundation Prize by the South Atlantic Association of Obstetricians and Gynecologists in February, 1950, was the recipient of another distinguished honor—the Foundation Prize awarded annually by the American Association of Obstetricians, Gynecologists and Abdominal Surgeons. The subject of this award, dealing with new observations in the anatomy of the female urethra, was presented before this Association at its annual meeting at the Homestead in Hot Springs, Virginia, in September, 1950. It is gratifying to report that a member of our resident staff has had the distinguished honor of presenting two different studies before such important organizations in the same year. Dr. Krantz is now a member of the staff in the Medical School of the University of Vermont.

Seven members of the staff presented twenty-six papers in ten states in this country and in one province in Canada during the year 1950.

It is unfortunate that the arrangement with the Department of Pathology, whereby two first assistant residents in this Department were assigned to the Department of Pathology for periods of six months each, had to be terminated on October 1, 1950. This action was made necessary because of the departure of several of our residents for duty in the armed forces.

#### DEPARTMENT OF PATHOLOGY

The courses in general and special pathology were given to second-year students during the winter and spring terms along the lines laid down in previous reports. The syllabus of pathology was changed considerably. The sets of microscopic slides, the hand specimen collection, and the album of kodachromes for study by the students were revised and enlarged. As in previous years the students were required to assist in at least one postexamination and later to recite the clinical data of the cases in correlation with the gross and microscopic findings before the class. To broaden their training further the students were encouraged to write essays in pathology on subjects of their own choosing. Thirty-seven students wrote essays, all of which constitute excellent formulations of present knowledge on a wide variety of topics in pathology. The students were also given the opportunity to formulate and perform experiments in pathology under the direction of members of the staff and to present their results to the entire class. Forty-five students participated in fourteen experiments having the following objects: to study formalin-induced arthritis in rats and the effect of ACTH on it; to study the effect of ACTH on turpentine-induced acute inflammation in the skin of mice; to study histologically the lesion of the Arthus phenomenon in rabbits sensitized to horse serum; to study the morphologic changes in the adrenal glands of guinea pigs sensitized to horse serum; to produce bone in the sheath of the rectus muscle under the influence of transplanted urinary epithelium; to study the changes in the thyroid glands of rats following administration of thiourea and thyroxin; to study the effects of cortisone on the growth of the Gardner lymphosarcoma in susceptible and resistant hosts; to study changes in the growth pattern and morphology of C3H mammary carcinomas produced by amethopterin and guanazole; to produce pericardial adhesions by introducing talcum powder into the pericardial cavity of the rat; to study the pathologic changes produced in the rabbit kidney following occlusion of its artery; to produce atherosclerosis and fatty liver in rabbits by dietary means; to study the effect of sex hormones on the production of atherosclerosis in female rabbits by dietary means; to study the cerebral blood vessels through a leucite window



in the calvarium of cats under controlled pharmacological and pathological conditions; and to study the response of the subcutaneous and visceral tissues to salts of beryllium.

The value of the course in general pathology was greatly enhanced by the contributions made by a number of men with primary duties in other departments and institutions. Dr Eugene L. Opie lectured on inflammatory and degenerative diseases of the pancreas; Dr. Paul Klemperer of Mount Sinai Hospital lectured on hypersensitivity and disease processes; Dr. Henry Jaffe of the Hospital for Special Surgery gave several lectures on diseases of bones and joints; Dr. Fred Stewart and Dr. Frank Foote of Memorial Hospital gave lectures on tumors; Dr. Maclyn McCarty of the Rockefeller Institute spoke on streptococcal infections. Dr. Milton Helpern generously supplied a number of valuable anatomical specimens for teaching purposes.

The more advanced teaching responsibilities of the department were discharged on a broad basis. The procedure for presenting cases at the weekly Clinical-Pathological Conferences was revised with a view to making them more instructive and interesting for students and staff. The conferences have been widely attended during the academic year. Postgraduate training in pathology was given to fourteen young physicians, including four members of the House Staff from other departments of the Center. The postgraduate training was augmented by five departmental conferences conducted each week by members of the senior staff; it was broadened further by training in the Laboratory of Surgical Pathology under Dr. John M. Pearce and in the Central Laboratories under Dr. Aaron Kellner.

The staff was comprised of twenty-seven members, of whom fourteen gave their full time to research, teaching, and the postmortem service, while seven others gave substantial amounts of their time to the work of the department. Dr. Vogel and Dr. Ellis held appointments as assistant professors of pathology in surgery during the year. Dr. Goetz Richter was awarded a Lewis Cass Ledyard, Jr., Fellowship of the Society of the New York Hospital for the year beginning July 1, 1951. He will study experimental hyperglobulinemia and amyloidosis. Three members of the junior staff found it necessary to resign their posts to report for active duty in the armed services as follows: Dr. John W. Mason, Instructor in Pathology, now Captain, MC, United States Army; Dr. Ben Selling, Assistant in Pathology, now Captain, MC, United States Army; and Dr. William Andrews, Assistant in Pathology, now Lieutenant, MC, United States Navy. In addition, Dr. Sung Soo Lee from Seoul University, Assistant in Pathology, was called back to Korea because of the war. Dr. Harcharan Dass Tandon, a fellow of the Institute of International Education from Sarojini Naidu Medical College, Agra, India, joined the staff in September. Three students of the fourth-year class took elective work in pathology during the year. Extramurally, Dr. Kidd served on the National Research Council, as a member of the Board of Scientific Advisors of the Public Health Research Institute of the City of New York, as a member of the Council of the Section on Microbiology of The New York Academy of Medicine, and as an associate editor of the *Journal of Immunology*. Dr. Pearce served as president and Dr. Olcott as secretary of the New York Pathological Society. Dr. Olcott has been in charge of the postmortem service of the second medical division at Bellevue on a temporary commitment.

Research has gone forward on the following problems: the intrinsic causation of cancer; structural changes produced in carcinoma cells by means of a specific antibody; the mechanisms of resistance and immunity to transplanted cancer cells; studies on the sedimentable constituents of cancer cells by serological means; the effects of gliotoxin and related compounds on tumor cells and tubercle bacilli *in vitro*; the relation of phospholipids to the pathogenesis of experimental atherosclerosis; myocardial lesions produced by viruses; selective spastic occlusion of the renal arterial system following the injection of staphylococcal toxin in the rabbit; and lipolytic enzymes in the pathogenesis of demyelination. These investigations were liberally supported by grants



from the United States Public Health Service, the American Cancer Society, the New York Heart Association, the New York Hospital-Cornell Medical Center Research Fund, and the Hoffman Foundation, Inc.

Three papers were presented at the meeting of the American Association of Pathologists and Bacteriologists and two papers at the meetings of the Federated Societies for Experimental Biology, in Cleveland in April, 1951. During the year, twenty-one publications appeared from the department.

#### DEPARTMENT OF PEDIATRICS

Courses for third- and fourth-year medical students have been essentially the same as in 1949-50. The third-year course includes a weekly lecture clinic for the entire class, a clinical clerkship of five and one-half weeks, and a course in contagious diseases given jointly with the Department of Medicine, in part at the Willard Parker Hospital. Clinical clerks are assigned individual patients and learn, by observation and experience, history taking, physical examination, and diagnostic, prophylactic and therapeutic methods. Normal growth and development and the emotional needs of children are emphasized. In addition to frequent seminars, rounds, and demonstrations on the pediatric pavilions of the New York Hospital, each student has two sessions at Memorial Hospital.

Progress has been made in cooperation with the Department of Public Health and Preventive Medicine in correlating the teaching of well-baby care in the Kips Bay Child Health Station and the New York Hospital Well Baby Clinics. However, it is still evident that insufficient time is allotted to medical students for this training.

The fourth-year class receives eleven pediatric lectures as part of a series held weekly throughout the year in which the Department of Public Health and Preventive Medicine and the Department of Medicine also participate. Each student has about twelve half-day sessions in the Pediatric Out-Patient Department, and elective courses are offered in the General Pediatric Clinic, the Isolation Unit, and the hematology, renal, pulmonary, cardiac, and metabolism clinics; about one-third of the class elected from four to twenty-four sessions.

Medical students, as well as the pediatric house staff and attending staff, attend a series of weekly conferences, one of which each month is devoted to a survey of recent X-rays, one to a follow-up of selected patients, one to clinical pathological presentations, and one to a discussion of emotional growth and development. Additional meetings are held on subjects of current interest within the department or jointly with other departments. Pediatric Grand Rounds, held every Friday afternoon, are open to pediatricians from the community as well as to staff members and students of Cornell University Medical College and the School of Nursing.

The house staff receive their training in the pediatric infants' and children's pavilions, the Premature Unit and full-term nurseries, the Pediatric Out-Patient Department's general, isolation, and specialty clinics, and the Nursing School. In addition, most of the members of the house staff have services in one or more of three affiliating institutions: The Hospital for Special Surgery, Memorial Hospital, and Willard Parker Hospital. The house staff takes considerable responsibility in the teaching of clinical clerks.

Since July 1, 1950, five full-time fellows have received postgraduate training in the Pediatric Out-Patient Department. Their assignments in the general and special clinics, their supervision by and conferences with senior staff members, and their attendance at regular conferences, were supplemented by special seminars for the full-time fellows and house officers in the Out-Patient Department, and the opportunity offered by Memorial Hospital to attend their Hemangioma Clinic and to take a six weeks' course in cancer and allied diseases.

Dr. Katherine Woodward, the Psychiatric Consultant to the Pediatric Out-Patient Department, and her staff have conducted a series of combined pediatric and psychiatric conferences for house officers and fellows.

In addition, four full-time fellows are engaged on studies, the results of some of which have been published or presented at meetings of medical

societies. Dr. Samuel Z. Levine, Professor, and Dr. Henry L. Barnett, Associate Professor, took part in November, 1950, in an international research seminar on infant metabolism under the auspices of the World Health Organization. These seminars were held in Leyden, the Netherlands, and in Stockholm, Sweden. Nine countries and twenty-one universities were represented. Dr. Levine served as chairman of the American group.

A valuable interdepartmental liaison was accomplished by the appointment of Dr. Henry D. Lauson as Associate Professor of Physiology in Pediatrics.

The department regrets the resignation of Dr. Mary Allen Engle, who has made valuable contributions to teaching and research and who has been a member of the interdepartmental team for diagnostic and therapeutic consultation in congenital diseases of the heart and great vessels. She leaves on June 30, 1951, to take a position in the Department of Pediatrics at Washington University in St. Louis.

The Institutes for Physicians and Nurses in the Care of Premature Infants completed their second full year. Although outside the curriculum of the Medical College, they deserve inclusion in this report because members of the faculties of the Department of Pediatrics and the School of Nursing conduct them, and members of the Department of Obstetrics, the Social Service Department, and the Nutrition Department participate. Intensive postgraduate training has been given to twenty-one physician-nurse teams from many parts of the United States. At each Institute, a joint two-week period of lectures, demonstrations, field trips and discussions for doctors and nurses was followed by two additional weeks of practical experience for the nurses only.

*Division of Child Development.* Under the direction of Dr. Mary E. Mercer, the program of the Division has continued its emphasis on the emotional needs of hospitalized children and on the emotional and social development of normal children, particularly as revealed in the activities of the New York Hospital Nursery School in which members of The New York Hospital pediatric staff and nursing staff have assisted actively. Pediatricians and other members of the professional staff, as well as visitors from outside, including teachers from the New York City school system, have profited by observation in the Nursery School and the Occupational Therapy Division. Conferences, seminars, and parents' meetings are held regularly. Affiliating occupational therapy students and the New York Hospital student nurses continue to receive instruction in the Pediatric Occupational Therapy Division. The service of faithful volunteers has been extremely valuable.

*Research.* Adrenocorticotrophic hormone has continued to hold a spotlight among the research activities of the department. Dramatic therapeutic results have been obtained in acute rheumatic carditis in which early treatment with this agent is of immediate and prolonged benefit. In the nephrotic syndrome, 80 per cent of trials with ACTH have resulted in diuresis with evidence of decreased glomerular permeability to albumin. ACTH has also been used in leukemia and in several other clinical conditions, and in chronic toxoplasmosis in experimental animals.

It has been demonstrated that ACTH consistently abolishes the metabolic defect exhibited by premature infants with respect to tyrosine and phenylalanine. Hematologic studies include investigations of serum iron and iron-binding protein in normal infants and other children and in the mothers of newborn infants, as well as in anemias of various types, in transfusion hemosiderosis and in the nephrotic syndrome. Serum and electrolyte lipid partitions in anemias, hepatic function in patients with hepatic hemosiderosis, and a new blood coagulation factor are also being investigated. Antidiuretic activity was demonstrated in the blood of a nephrotic child with massive edema by transfusion into a patient with diabetes insipidus; this response was absent when the same nephrotic child underwent ACTH-induced diuresis.

In cooperation with the Department of Ophthalmology, the pathogenesis of retrolental fibroplasia has been carefully worked out, and additional heretofore unknown data have been obtained. Vitamin E has not proved to be of benefit in the prophylaxis of this disease. ACTH may prove more promising in

therapy, but it is too soon to draw conclusions from work now in progress.

Of the eighty smallest premature infants discharged alive from the Premature Unit between 1940 and the end of 1950, twenty who weighed less than two and a half pounds at birth have been recalled for intensive physical, social, and psychometric studies. So far in this group, as in a much larger group of premature infants of higher birth weight, the chance of normal mental development appears to parallel that in the general population. In weight and height, they tend to catch up to normal standards by the age of five years or earlier.

Electrocardiographic technics using standard limb leads, multiple unipolar leads, and augmented unipolar limb leads, have been undertaken in normal children, in those with congenital or acquired heart disease, and in other disease states such as nephritis, chronic anemia, and hyperpotassemia. In co-operation with the Department of Pharmacology, the results will be published in an atlas of pediatric electrocardiology.

Studies in rheumatic fever have had, in addition to the therapeutic effects of ACTH mentioned above, two principal facets. The first consists of continued observation and medical supervision of large numbers of families, children, and adults, furnishing data regarding life expectancy and regarding the concept of recessive inheritance of rheumatic fever. The second group of studies consists of biochemical investigations which include steroid, sulfur, and uric acid metabolism, and a study of factors responsible for increased sedimentation rates. Amino acids studied by chromatographic methods have not as yet been shown to be significantly different in rheumatic and in normal children.

In collaboration with Dr. William Ehrich of the Graduate School of the University of Pennsylvania, it has been shown that diseases can be induced in rats which are pathologically similar to both acute nephritis and nephrotic syndrome in children. The effects of ACTH, cortisone, and adrenalectomy on rats with this experimental disease have been studied.

A total of 153 addresses on medical subjects have been given to professional and lay audiences outside the institution. Thirty-six papers have been published or are in press. Fifty-one physicians from foreign countries and from various parts of the United States have spent from a few hours to several months as visitors or observers. The countries represented were: Argentina, Australia, Bolivia, Brazil, Canada, Chile, China, Colombia, England, Finland, France, Germany, India, Israel, Java, Norway, Paraguay, the Philippines, Sweden, Switzerland, Thailand, Turkey, and Venezuela.

Financial support for research and teaching activities has been received from the following sources: Marion R. Ascoli Fund; New York Fund for Children, Inc.; the Commonwealth Fund; Rheumatic Fever Research Fund; Pediatric Educational Fund (various donors); McHarg Fund; the United States Public Health Service; Child Development Fund (various donors); Children's Blood Fund (various donors); Playtex Park Research Institute; Ruth Kirk Green Fund for Crippled Children; Children's Bureau of the United States Federal Security Agency; the National Foundation for Infantile Paralysis, Inc.; Fund for the Pediatric Department; and Fund for Premature Infants.

#### DEPARTMENT OF PHARMACOLOGY

With full complement of staff and special investigators, we have experienced an unusually active and fruitful year. Dr. Charles J. Kensler resumed his duties in the Department last summer, following a year with Professor Burn of Oxford. Dr. Theodore H. Greiner, who worked here formerly as a U.S. Public Health Service Fellow, returned to us and assumed charge of the clinical program under Dr. Gold's direction. New additions to our group include Dr. Christian Wingard and Dr. Sydney B. Mathes, with fellowships from the U.S. Public Health Service; Dr. Raymond R. Marsh, Dr. Seward J. Baker, one of our own graduates, and Dr. H. Langemann from Switzerland. At the present time we have on our staff twelve members of the American Society for Pharmacology and Experimental Therapeutics. Four graduate students are majoring in pharmacology, and several medical students have spent their elective and

other free time in the department. With our relatively large staff, it has been possible to give increasing individual attention to the medical students and to give more demonstrations and conferences to small groups.

Conferences on therapy, initiated fourteen years ago, have been continued on a weekly schedule throughout the year. Volume IV of the *Cornell Conferences on Therapy* was published by the Macmillan Company early this year. The publishers report widespread interest and increasing sales, and it is apparent that these volumes are serving a useful purpose.

The various research programs conducted by members of the staff have gone forward actively as is evidenced by the list of publications. It may be of interest to make brief mention of the results of three lines of work which appear to be particularly significant.

Experiments reported last year by Dr. Gold and his associates indicated that the conventional view that vomiting from over digitalization by the oral route in man is a systemic action and may be erroneous, and that the action is more likely a local one in the gastrointestinal tract. The study has been extended to include digitoxin, digoxin, lanatoside C, and Digifoline. Patients received oral doses over a period of twenty-four to forty-eight hours until vomiting occurred; and, after recovery, intravenous doses were repeated at varying intervals. As judged by the change in the T-wave, impairment of A-V conduction, or the slowing of the ventricular in auricular fibrillation, it was possible to obtain greater cardiac effects without gastrointestinal toxicity by the intravenous than by the oral route. It has been concluded that the vomiting commonly ascribed to a systemic action is due to a local action, because it can be avoided by the parenteral route of administration. These results point to the possibility of obtaining greater therapeutic action on the heart by parenteral than by oral administration and will be an important factor in the choice of digitalis glycosides. In previous experiments, it has been shown that there are wide differences in the local emetic activity of different members of the digitalis group.

The group under Dr. Kensler has continued studies on the mechanism involved in the production of hepatic neoplasms in the rat by AZO dyes. Since choline deficient diets result in hepatic neoplasms, the hypothesis that the AZO dyes act by inducing a chronic deficiency is being further explored with emphasis on choline and "labile methyl" group metabolism.

During the year, Dr. Riker and his associates completed their studies on anticurare agents which led to the development of a new compound now in extensive clinical use. For this work, Dr. Riker was awarded the Abel Prize of the American Society for Pharmacology and Experimental Therapeutics at the May meeting in Cleveland, consisting of a medal and \$1,000. Further studies have concerned the pharmacology of a synthetic organic compound having curariform properties. This compound, prepared by Lederle Laboratories, is known by the trade name of Flaxedil. It has proved of particular pharmacologic interest because its intimate mechanism of action is like that of the natural d-tubocurarine. In addition, it possesses certain therapeutic advantages, since its specificity of action is greater than that of d-tubocurare. Unlike the natural alkaloid, it does not interfere with ganglionic transmission and does not cause histamine liberation. However, the blockage of neuromuscular transmission is accompanied by a persistent blockade of the cardiac vagus. Suitable modification of the structural groupings of Flaxedil has resulted in a compound retaining the characteristic curariform action but from which other undesirable lytic actions are absent. This compound will soon receive clinical trial, and, from a therapeutic standpoint, it should prove to be an ideal curariform agent.

Of the thirty-one publications from the department during the year, fifteen were extensive papers, ten were abstracts of papers to be presented, and six were reports on therapy conferences.

In keeping with the trend in recent years, support of research from outside sources has been obtained increasingly from foundations and government agencies. Because of the limited facilities of this department, it was necessary



correspondingly to reduce the amounts of grants received from industry. From the following industrial concerns: Wyeth, Inc., Eli Lilly, Vale Chemical Company, Gebauer Chemical Company, and Lederle Laboratories, a sum of \$17,500 was received. The U.S. Public Health Service supplied \$49,000 in the support of four different research projects; the American Cancer Society gave \$13,356 in support of two projects; the Therapeutic Research Foundation supplied \$1,350; the Dietz Foundation, \$1,000; the American Heart Association, \$5,565; and the Sloan Foundation, \$10,000. In all, foundations and governmental agencies provided \$80,271 in support of the work in this Department.

In the summer of 1950, Dr. McKeen Cattell, the head of the Department, spent two months in Japan as a member of a group from the preclinical and clinical department organized by the Unitarian Service Committee on invitation of the Supreme Commander of the Allied Powers. The purpose of the mission was to acquaint Japanese colleagues with American medical educational methods and with recent advances in the medical sciences. The heads of the departments from forty-six Japanese medical schools assembled in Tokyo and Kyoto where they were grouped in classes representing different fields of medicine. Dr. Cattell met with the pharmacologists for five hours each day for lectures, demonstrations, and conferences. In March, 1951, Dr. Cattell left for a month in England where he was invited to give a series of lectures at the universities of Oxford, Cambridge, London, Leeds, Birmingham, Sheffield, Manchester, and Edinburgh, and at the National Institute of Medical Research. In June, 1950, Dr. Cattell attended the annual meetings of the American Medical Association, where he served as chairman of the Section on Experimental Medicine and Therapeutics and gave the chairman's address. In the spring of 1951, Dr. Cattell was elected president of the Society for Pharmacology and Experimental Therapeutics and was made chairman of the Advisory Committee of the National Research Council's Chemical-Biological Coordination Center.

#### DEPARTMENT OF PHYSIOLOGY AND BIOPHYSICS

The physiology course for medical students was reorganized in order to provide certain correlation with the teaching in other departments. The order of presentation of subjects was revised as a result of conferences with Dr. Cattell, so that students will have completed their work in nerve, muscle, heart, circulation, blood, and the nervous system before they begin their course in pharmacology at the start of the second year. These subjects are considered most necessary as a background for pharmacology. Emphasis in the teaching of subject matter common to physiology and biochemistry has been modified as a result of conferences with Dr. du Vigneaud, with the view of improving correlation of the two disciplines. The emphasis of the laboratory course on function of the normal human body, although always great, has been increased still more. This development has been facilitated by the acquisition of new apparatus permitting quantitative studies on man, such as a Millikan oximeter, an automatic alveolar air sampler and analyzer, a fluoroscopic unit, new simplified Frye gas analyzers, visocardiettes, spirometers and metabolism apparatus. Another element favoring this type of laboratory emphasis has been the association with the Department of a number of postgraduate fellows. This has permitted teaching of students in small laboratory groups. The enlargement of the physiology lecture room, which was done during the summer of 1950, has benefited not only the Department of Physiology but also the Departments of Bacteriology and Pathology. A number of individuals have contributed generously of their time to the teaching of limited phases of physiology with which they have had intimate research contact. The teaching of individuals such as Dr. Lauson of the Department of Pediatrics, Dr. Zweifach, Dr. Lee, and Dr. Bird of the Department of Medicine, Dr. Eugene du Bois, Emeritus Professor of Physiology, and Dr. John MacLeod of the Department of Anatomy is not only informative but is inspirational. This past year greater use has been made



of moving pictures in the teaching of physiology. A series of good rental films has been compiled, and, as good new films become available, their use will be further expanded.

Six postgraduate fellows have been associated with this Department during the past year: Dr. David Axelrod (New York Community Trust Fellowship), Dr. David Thompson (U.S. Public Health Service Research grant), Dr. Kathleen Roberts (American Heart Fellowship), Dr. Sherman Kupfer (U.S. Public Health Service Fellowship), Dr. Karleen Neill (Navy Research Grant), and Dr. Carl Clark (Navy Research Grant). These individuals have contributed to the Department in two ways: they have assisted in the laboratory and conference teaching programs, making possible the instruction of students in small groups; and they have contributed to the research programs of the Department, both in thought and in prosecution. In return the Department has provided both teaching and research guidance and training. It is probable that from a group of this kind an occasional fellow will be attracted into pre-clinical teaching and research. In any event a number will no doubt stay in academic medicine in the clinical divisions. During this past year one of the departmental deficiencies has been its failure to engage in the training of graduate students in physiology. It was decided at the start to avoid this responsibility during the first year of a major departmental reorganization. At the present time plans are under way to expand graduate training gradually accepting as they become available candidates of real promise. Up till now one graduate student has been accepted for this next year and others are under consideration. Two senior medical students spent their elective time in physiology: James Sullivan and Augusta Alba. As a result of his contacts with the Department, Dr. Sullivan has asked to return as a fellow after a year of internship. Four graduate students in biochemistry have taken the first part of the course during this past spring, and four others took it in the second part of the course last fall.

Four members of the Department gave ten lectures to outside groups during the past year, and eight of them presented papers from this laboratory. During the past year, twelve papers were published from the Department and, in addition, there were eight abstracts of papers published which were given at the meetings of the American Physiological Society in Cleveland. Dr. Robert Pitts, the head of this Department, served in several capacities in outside assignments as follows: member of the Advisory Committee, Army Medical Services Graduate Schools, National Research Council; member Physiology Study Section, United States Public Health Service; member of Board of Publication Trustees, American Physiological Society; member of Editorial Board of Annual Reviews of Physiology; editor of American Lectures in Physiology; member of Council, Harvey Society; and chairman, Section on Kidney, Josiah Macy, Jr., Foundation. Dr. James Hardy has also had a number of outside assignments: chairman, Medical Science Division of Volunteer Naval Research Reserve Unit of New York City; consultant in physiology, Sloan-Kettering Institute; member, Technical Advisory Committee of Society of Heating and Ventilating Engineers; Board of Consultants in Biophysics, National Institute of Health; and member, Growth Committee, National Research Council.

A sum of \$82,535 was supplied from outside sources to support the research: Office of Naval Research; Armed Forces, Special Weapons Division; U.S. Public Health Service; American Heart Association; and Life Insurance Medical Research Fund. The research programs that are under the direction of Dr. James Hardy are: (1) Thermal Radiation and Heat Load; (2) Interaction of Thermal Radiation and the Skin; and (3) Elasticity of Visceral and Somatic Structures. The programs that are being pursued under the direction of Dr. Pitts are: (1) Relationships between Activity of the Adrenal Cortex and Posterior Lobe of the Pituitary and Fluid and Electrolyte Retention; (2) Respiratory and Renal Interrelationships in the Regulation of Acid Base Balance; and (3) Renal Regulation of Electrolyte Composition of Body Fluids in Health and Disease.

## DEPARTMENT OF PSYCHIATRY

One of the main features of the undergraduate teaching in psychiatry is the persistent attempt during all four years to make the student aware of the individuality of the patient. In the first year he obtains an understanding of the physiologic, psychologic, and social development of a person from infancy to old age. The role of normal and pathologic emotional reactions is stressed in the preclinical and clinical years. The student may learn to recognize and treat such reactions in patients in the psychiatric department as well as in the in- and out-patient departments of the general hospital. Emphasis in undergraduate teaching is put on what is important for a well-trained physician. Although the student becomes informed on special psychiatric methods of study and treatment, the practical task is to learn methods of examination and evaluation which are necessary for a well-trained physician. Various methods of psychotherapy, especially psychotherapeutic interviews, are tools which he must be able to use.

As the first-year course serves as orientation in mental health of average persons, it is proper that the instructor become the psychologic advisor and psychiatric counselor to the students. Much of his time is devoted to personal interviews with students who seek help for personal problems, which may vary from mild concerns and bewilderment to serious psychiatric disorders. Other students ask for advice with regard to psychiatric problems in relatives and friends. The confidential way in which such interviews are treated encourages the student to turn readily to his psychiatric teacher.

The reorganization of the Psychiatric Children's Division has been completed and the basis laid for future training of psychiatrists in the field of child psychiatry. At present, every senior assistant resident participates in this department. The aim is for him to obtain an understanding of the fundamentals of the psychiatric study and treatment of children under ten years of age. This type of training includes the treatment of parents as well as children and an understanding of the social and educational aspects involved.

Psychiatric postgraduate training in the Out-Patient Departments of the Payne Whitney Psychiatric Clinic and of Medicine and Pediatrics has been given to psychiatrists who finished their resident training elsewhere. The majority of these fellows will, after completion of one year of training, return to their medical schools as teachers of psychiatry. The weekly staff conferences with the staff of Medicine A, which include Commonwealth Fund fellows, have been continued. They are most valuable exercises for psychiatric-medical thinking.

Facilities for graduate training and research were expanded considerably when the Department of Psychiatry assumed the obligation of supervising the medical, educational, and research activities of the Franklin Delano Roosevelt Veterans Hospital near Peekskill. A residency system was developed along the lines of that of the Payne Whitney Psychiatric Clinic. The residents will spend the first two years in the V.A. Hospital and the third year in the out-patient service of the Payne Whitney Psychiatric Clinic. This large hospital offers a great opportunity to study the progressive deterioration which may occur in schizophrenic, epileptic, and senile disorders. In addition, it will be possible to compare therapeutic results on a large number of patients. A comprehensive research program is being formulated and encouraging investigations have been started.

An important development was presented by the establishment of a Division of Social Psychiatry at the beginning of the academic year. Its task is to understand the functioning of an individual in his group. The goal of medicine is to make it possible for an individual to live without seriously disturbing conflicts, not only within himself, but also with those around him and with his community. The prevention of psychological difficulties will not be possible unless the social, as well as the psychological, forces in the family and in the community are studied. An important task of social psychiatry in the preventive field is the finding and using of positive factors in the life of the community. Thus, it will become possible to create security in the infant and child, the ado-

lescent, the adult, and the aging. It is the plan to develop a comprehensive community mental health program in the Kips Bay-Yorkville Health District where much valuable knowledge of the social, racial, and economic organizations is available. Through the activities of the Division of Social Psychiatry, an active force in the community will be created which will further mental health and aid in the prevention of psychiatric disorders.

Studies in psychopathology (Dr. Diethelm and co-workers) continued primarily in the field of emotions. In addition, investigations were carried out in adolescents by means of the thematic apperception test. The Minnesota Multiphasic Personality Inventory has given interesting results in the changing psychopathology of patients under treatment. In child psychiatry, attention was focused on infantile autism. The influence of anxiety on the psychogalvanic reflex has been established on students and patients. The same technique was applied to the degree of tension which occurs with deception (lie detector test). In the clinical field, methods of intensive psychotherapy of the depressive and manic-depressive illnesses have been utilized effectively. The study of the social behavior of psychoneurotic patients in the in-patient service has led to considerable therapeutic improvement. Studies in the prognosis of psychoneuroses and of the efficacy of treatment have been concluded.

Considerable progress has been made by Dr. Milhorat and his co-workers in furthering knowledge concerning muscular dystrophy. A new and simple method for the determination of vitamin E in the blood was developed. The vitamin E content of the blood of subjects with psychiatric and muscular disorders was determined. The presence of a heretofore unknown vitamin E compound in the blood was shown. The occurrence of "wrist stiffness" in rabbits with muscular dystrophy which results from lack of vitamin E was described. The relation of this "wrist stiffness" to contractures in patients was studied. The antistiffness factor in foods was investigated by ultraviolet and infrared spectrophotometry and has been identified. The effect of cortisone and ACTH on muscular dystrophy was studied further.

Among several studies in electroencephalography might be mentioned the recognition of the influence of anxiety and tension. Promising results have been obtained through metrazol stimulation in patients who showed electroencephalographic findings which might be related to convulsive disorders.

Under the direction of Dr. Harold G. Wolff, experimental studies have been continued to clarify further the relationship of psychic disorders and life stress. The major focus during the past year has been on diabetes, essential hypertension, acne, seborrheic secretion in the skin, cutaneous muscular mechanisms involved in hives and itching, vascular headaches, gastric function, and interactive colitis. Among other work in progress, should be mentioned an attempt to assess in a reliable way the effectiveness of treatment in patients with hypertension, diarrhea, asthma, and headache. To this end, hundreds of items concerning each of the various patients have been listed, including data about the patient and his background, the patient's own evaluation of his attitudes and experiences, and the physician's evaluation of the patient in terms of his goals and his past performance.

Investigations in the etiology of chronic alcoholism have progressed satisfactorily. The study of substances in the blood and emotional reactions has advanced our understanding, and it became possible to observe the influence of alcohol and drugs on emotions. It was demonstrated that nor-epinephrine is in the blood when anxiety is present. This substance is tied to red blood cells. Other physiological studies were directed toward clarifying the role of emotions during ovulation and menstruation in women. Electroencephalographic observations on alcoholic patients offered promising results. Observations and analyses of social behavior led to a better understanding of the individual's relation to a group and offered a basis for constructive group management and group psychotherapy. The Committee on Problems of Alcohol of the National Research Council has continued its liberal support of this research program.

Addresses have been presented by several members of this department to

various societies and outside groups, and forty-nine papers appeared during the year.

#### PUBLIC HEALTH AND PREVENTIVE MEDICINE

*Parasitology.* The course in parasitology was given by the Department to the second-year students during the first trimester. Through various friends in South and Central America, the West Indies, and West Africa, we have been able to augment our demonstration and teaching material most effectively. Every student is supplied with a collection of over one hundred excellent specimens for study. This is in addition to abundant demonstration materials. Thus, the course has been more valuable to the students than ever before. Dr. Robinson, who carried the major responsibility for the teaching, was called to military duty and is now stationed in Burma as consulting parasitologist. He was an able teacher, and we shall miss his services greatly.

*Public Health.* This is the course in environmental sanitation and public health which is given one afternoon each week during the second trimester of the second year. The class is divided into two sections. Four full afternoons for each section are devoted to a study of statistical methods and their interpretation. Field exercises are conducted which demonstrate all the various readily available environmental factors which affect health, including housing, industrial health promotion, food sanitation, organization of local health activities, and the like. Dr. Rigney will have direct responsibility for this course during the coming year.

*Third Year.* The plan for family health advisory services has been extended this year. Dr. Beatrice Berle has joined our staff. She is a trained social worker as well as a physician and has brought enthusiasm and better insight into the family problems that are observed and studied by the students. The reports of the teaching on their family studies illustrate the value of this type of teaching. This year, every student has made a study of one family during this section work with us. This observation is carried out over a period of five to six weeks. In addition, some twenty selected students have become family health advisers. Each is assigned to a family for the entire year. He will carry this period of family observation into the fourth year. Students who were not selected as family health advisers had a choice of making: (a) a community report on the adequacy of medical care; (b) a report on some selected subject in epidemiology or public health. These reports were of the same type as those prepared in previous years and were of a high quality.

*Fourth Year.* This year the senior course in clinical preventive medicine was given in a series of Wednesday afternoon sessions shared with the Departments of Medicine and Pediatrics. Twelve exercises were organized by this department to present the principles and practice of preventive medicine in representative fields. Illustrative clinical cases were presented by members of the class and discussions were led by cooperating clinicians from the various departments of the Faculty. Two exercises on alcoholism and accident prevention were direct cooperative enterprises with the Department of Psychiatry. Elective work was undertaken by several students in child health and mental hygiene. The opportunity to gain experience in cancer detection examinations was again offered at both the Kips Bay-Yorkville Health Center and Strang Cancer Clinic and was utilized by an increasing number of students. The fourth-year course was curtailed from thirty-three to twelve hours, and, thus, the teaching was somewhat inadequate. The cut was for this year only, as a tentative plan, pending complete change in the fourth-year schedules that will be initiated in the near future. Under the new plan for fourth-year teaching, it is anticipated that the clinical aspects of preventive medicine will be given greater emphasis.

In general, the teaching has improved over last year, particularly in the third-year course. The increasing emphasis on family studies is a satisfactory trend. We are grateful to the staff of the Kips Bay-Yorkville Health Center for their splendid cooperation in the teaching. This includes the Director, Dr.



Kent, the directors of public health nursing and district nursing, and the medical staff of the Division of Child Health, School Health and Tuberculosis Control. Miss Soule, Director of Social Service in this Center, has been of great assistance in our teaching. Dr. Willis Weeden, Medical Director of Workmen's Compensation, and Dr. Samuel Sverdllick in Rehabilitation, have been helpful in giving their teaching exercises to our section groups in the third year.

The activities of the Kips Bay-Yorkville Cancer Detection-Prevention Clinic have been carried on for the past year under the direction of Dr. Thomas G. Rigney. At the present time a statistical survey, based on some two thousand patients, is being completed preparatory to the publication of a paper covering the various activities of the clinic. This clinic has been available to students in their third and fourth year, as well as to physicians practicing in the Kips Bay-Yorkville health district. Both of these groups have used the clinic to further their own education in cancer detection.

With the continued support of the Josiah Macy, Jr., Foundation, Dr. Nine Choucroun has continued her studies on the lipo-carbohydrate content of the tubercle bacillus and the bacillus of leprosy. The studies on the precipitin test in various stages of leprosy have been continued through cooperation with the U.S. Public Health Service in Carville, Louisiana, and the Mexican government in Mexico City. In the United States Public Health Service Tuberculosis Research Laboratory, conducted under the direction of Dr. Bernard D. Davis in this department, studies have continued on bacterial mutants. It has been shown that mutations in bacteria can cause production of a qualitatively altered enzyme. Dr. Morton C. Kahn and his colleagues have worked in the field of bacterial allergy and asthma. These investigations have been carried out in cooperation with Dr. Horace Baldwin who is in charge of the Allergy Clinic in the Department of Medicine.

Hugh De Haven has continued as Director of Crash Injury Research, which is now located in the Department of Public Health and Preventive Medicine. During this past year they have continued to obtain and present to airplane manufacturers and designers data on causes of injury and fatality in survivable accidents. Within the current year three new civil airplanes have been developed featuring protection of pilots and passengers in such accidents. Relations have been maintained with various groups in the provision of crash-worthiness and increased protection of personnel in aircraft accidents, such as the Navy, Air Force, Civil Aeronautics Administration, Civil Aeronautics Board, state accident investigating agencies, airlines, aircraft and accessory manufacturers, foreign groups, university aviation projects, and other organizations whose researches parallel those of the Crash Injury Research. They have cooperated with State Police in initiating research on crash injuries in automobiles and other ground vehicles. There have been a number of releases on "Informative Accidents," demonstrating the protective values of backward-facing seats, safety belts, and shoulder harness.

The head of this department, Dr. Wilson G. Smillie, has served as the president of the New York Tuberculosis and Health Association.

#### DEPARTMENT OF RADIOLOGY

It is with regret that I report the resignation of Dr. Robert P. Ball, Professor of Radiology and head of this Department, to take effect on July 31, 1951. Dr. Sidney Weintraub has been appointed the acting head of the Department, and we have been fortunate in securing the full-time services of Dr. John A. Evans, who is playing an important role in the teaching and the service of this Department.

As in previous years, the activity of the Department of Radiology with other departments in the institution has been a productive one. An outstanding contribution made during this past year has been the introduction of a method of examination of the dural sinus veins. This procedure has proved most helpful in the diagnosis of intracranial lesions and in evaluating the operability of



certain brain tumors. This work on dural sinus venography was developed by Drs. Ray and Dunbar of the neurosurgical division of the Department of Surgery and Dr. Dotter of the Department of Radiology. They were awarded a certificate of merit by the American Roentgen Ray Society at their meeting in St. Louis in September, 1950. Cardiac catheterization and cardiopulmonary studies were carried out with the Departments of Medicine, Pediatrics, and Surgery. Explorations in angiography have continued, and more frequent applications are being made of this in the field of clinical medicine.

Studies of the interior of the heart by catheterization and angiocardiology have been diligently pursued by Drs. Dotter and Steinberg. They have devised and perfected a new type of catheter which is used to great advantage in the study of pulmonary function and disease. With the collaboration of Dr. Lukas of the Department of Medicine, studies are being made of residual pulmonary changes in poliomyelitis. With Dr. Stephen Vogel of the Department of Pathology, Dr. McClenahan has perfected a technique in which he uses a low melting point alloy for the infection of blood vessels of anatomical specimens. After the alloy has hardened and a radiologic examination has been made, the tissue can be removed leaving a perfect casting of the vascular tree in metal.

#### DEPARTMENT OF SURGERY

Formal instruction in surgery for the undergraduate begins in the third trimester of the second year with a course totaling twenty-four hours, entitled "Introduction to Surgery." During the first hour of these sessions each student takes a history and does a complete physical examination on a patient assigned to him. The second hour of the period is devoted to discussion of the cases in small groups under the direction of a senior member of the surgical staff. This serves as a very effective introduction to clinical work.

The third-year student now starts his clinical work in the Out-Patient Department where he gains an over-all perspective of surgical problems and the indicated therapy. He works in all the surgical specialties as well as general surgery, in close contact with both senior and resident staff, who share in his instruction. A clinic at noon each Wednesday, attended by the entire third-year class, is conducted by the head of the Department and his associates. Save for this hour, the class is divided into thirds, with each group spending eleven weeks in surgery. Wednesday morning each week (33 hours) is devoted to a course in operative surgery on animals. This is given in the Laboratories for Surgical Research and is designed to emphasize the fundamental principles and techniques of surgery. Three informal lectures each week (33 hours) cover conditions generally classified as "minor surgery," which are usually treated in the clinic without admission to the hospital. The student also spends a half-day a week (33 hours) in the Surgical Diagnostic Clinic, where he sees a wide variety of surgical conditions and gains experience in history taking, physical examination, diagnostic work-up, and care of out-patients. The same amount of time is spent in the minor surgery clinic, where wounds are dressed, minor operations are performed, and postoperative care is continued for patients discharged from the hospital. Fractures receive special attention and are covered by eleven lectures and twenty-two hours in the fracture clinic. Throughout his work the student is guided and helped by senior instructors. Work in the Out-Patient Department during the third year includes study in the following surgical specialties:

*Ophthalmology.* A series of lectures and clinical demonstrations one afternoon each week (eleven hours) covers the more common eye conditions. Eight hours are also spent in the Ophthalmological Clinic.

*Orthopedics.* Clinical lectures illustrated by presentation of cases are given weekly (eleven hours) and twenty-two hours are spent in the Orthopedic Clinic.

*Urology.* Lectures and clinics are held twice weekly (twenty-two hours) and include presentation of patients with a wide variety of urological conditions. Twenty-two hours are spent in the Urological Clinic as well.

In addition to the above, the third-year student may attend clinical conferences at which problems of special interest are presented. These are usually interdepartmental and cover tumors, fractures, gastrointestinal, pulmonary, and cardiovascular conditions.

During the fourth year the class is divided into five sections, and each group spends eight weeks in the Department of Surgery. The students work on the surgical pavilions as clinical clerks and devote their time to assisting in the care of patients, attending operations, and ward rounds. Several students in each group spend their clerkship in the Second (Cornell) Surgical Division at Bellevue Hospital, where there is a large and varied assortment of clinical material. Two hours each week are also given to surgical pathology, ophthalmology, and a surgical symposium at which the students present material on recent advances in surgery. On the basis of a forty-hour week, the time on surgery during the year is spent as follows: clerkship, 25; general surgery rounds, 3; specialty rounds (neurosurgery, plastic surgery, thoracic surgery), 2; surgical pathology, 2; surgical grand rounds, 1; surgical symposium (recent advances in surgery), 2; ophthalmology, 2; medicine, psychiatry, public health and pediatrics, 3.

Dr. Frank Glenn, Lewis Atterbury Stimson Professor of Surgery, and his immediate associates, Dr. Charles G. Child, III, and Dr. Samuel W. Moore, were assisted in the administration of the Department by Dr. William A. Barnes, Dr. William F. Nickel, and Dr. Ward D. O'Sullivan.

The teaching activities of the Department comprise undergraduate instruction of the medical students and graduate training of the resident staff. For the medical students this has consisted of a more personal type of instruction and an opportunity to gain firsthand experience. The graduate group, consisting of a resident staff of 60, distributed between general surgery and the six specialties, anesthesia, and surgical pathology, have continued their clinical and investigative work. The total bed capacity for surgery is 243, with 120 beds assigned to general surgery and the balance divided between the six specialties according to their needs.

General Surgery admitted 2,851 patients to its 120 pavilion beds for 3,065 operations. There were 48 postoperative deaths, a mortality of 1.56 per cent. Autopsies were obtained in 30 cases, 62.5 per cent of these deaths.

The year 1950 saw new surgical advancements as did the years preceding it. Developments in any one year are not numerous, but the aggregate result over a ten-year period shows marked changes in the type of work done. First of all, they are doing a number of procedures today which had not been developed ten years ago. This is particularly true of cardiovascular surgery and also the correction of congenital anomalies and the surgery now done on the aging patient. This latter phase is becoming more important, because the older group is gradually increasing its proportion to the total population. Second, the amount of surgery formerly done for infection has been decreased by chemotherapy. Osteomyelitis, for example, an infection often beginning in childhood and running throughout life, formerly required many hospital admissions and prolonged ambulatory treatment. Now it is a rarity on the surgical floors, because it can be readily and effectively controlled in its early stages by antibiotics.

The daily requirements of a surgical service are constantly changing. With the advancement of surgical knowledge, largely as the result of research, more controls are necessary. The total effort now required to complete many of the new procedures successfully is great. Resection of a coarctated segment of the aorta, for example, requires not only several hours of meticulous surgery at the operating table, but elaborate tests on the patient in advance of the operation and careful attention to many details in the postoperative period. As our methods become perfected they become more and more dependent upon highly trained personnel for their proper execution. Not only must the surgeon today possess greater knowledge and judgment than his predecessor, but he requires the special assistance and cooperation of a number of skilled associates.

During 1950, special attention was directed toward a number of clinical

problems whose solution depends not only on the clinical facilities of the hospital, but also those available in the laboratories for surgical research. These particular problems have included water and electrolyte studies, cardiovascular surgery, liver disease, cancer of the esophagus, peptic ulcer, and gastric cancer research.

Neurosurgery, under Dr. Ray, admitted 275 pavilion patients for 415 operations with 34 deaths, a 5-per-cent mortality. This service has continued to work closely with Dr. Harold Wolff's Division of Neurology in the Department of Medicine. Dr. Ray has been assisted by two senior neurosurgeons and his resident staff of three. Neurosurgical studies on the sympathetic nervous system were continued until the illness of Dr. Console forced abandonment of the formal program. Since that time only isolated observations have been feasible. A method of intracranial venography has been perfected which permits determinations of any change in the normal venous pattern due to intracranial disease; it consists of injecting diodrast through a catheter introduced into the anterior sagittal sinus. The development of a serial roentgenography, which has gone hand in hand with this work, has made adequate visualization of the venous system possible. This method has been described in three publications; the technique makes it possible to determine before operation whether or not an intracranial neoplasm has invaded the dural sinuses and whether the compensatory circulation is adequate.

Admission to the 19 pavilion beds of ophthalmology totaled 393 for 1950. There were 376 operations done with no deaths. Almost the entire staff under Dr. McLean was engaged in intensive study on the application of the new agents, ACTH and cortisone, to various diseases of the eye during the year. The results have been gratifying. Starting with systemic administration, methods were developed for controlling many types of acute and chronic eye disease, some of which had hitherto been considered hopeless. Following this, methods were devised for using cortisone locally in the eye, both in the form of drops and as conjunctival injections. These studies begun under a U.S. Public Health Service grant are being continued under a new grant from the same source. A survey of congenital cataracts in children born to mothers vaccinated during pregnancy has been conducted in the Out-Patient Department by Dr. Stewart Snyder. Working with Dr. Irving Wright of the Department of Medicine, Dr. McCusker completed a study of the effects of dicumarol on chronic glaucoma. Motor anomalies of the eye have been studied by Dr. Edward Dunlap, assisted by an orthoptic technician.

Orthopedics under Dr. Liebolt admitted 170 patients to its 15 pavilion beds for 142 operations with one death. A senior staff of nine and a resident staff of four assist Dr. Liebolt. A special clinic was opened this year to give greater attention to poliomyelitis patients. This is jointly conducted by members of this service, Physical Medicine, the Department of Medicine, and Social Service.

During 1950, 1,042 otolaryngology pavilion patients underwent 903 operations without a death. Dr. Moore has been assisted by a senior staff of fifteen and a resident staff of three. There is a trend toward more extensive surgical treatment of cancer in otolaryngology, and increased attention has also been directed toward disorders in hearing and speech. An audiologist has been added to the staff to fill a long-standing need. With this added service more attention can be directed to the selection of patients for the Lempert fenestration procedure, while at the same time patients who are found to be unsuitable for this operation may be given some assistance with hearing aids.

The Plastic Surgery service under Dr. Conway completed 297 operations on 216 pavilion patients in 1950 with one death. Dr. Richard B. Stark, a member of the resident staff in 1948, joined the senior staff in October. The program covering care of patients with harelip and cleft palate anomalies has been continued with support from the New York State Association for Crippled Children. The services of a speech therapist, an orthodontist, a psychiatrist, and a social worker are used in this work. Dr. Cole and Dr. Eby have continued in the Dental Clinic as Astor assistant orthodontic surgeon to out-patients and

consultant in orthodontia respectively. Improved speech has been effected in complicated cases of cleft palate through adjuncts to therapy as well as new operative techniques.

Urology under Dr. Marshall admitted 806 patients to 42 pavilion beds during 1950. Five hundred eighty-nine operations were performed with four deaths, an operative mortality of 0.7 per cent. Since merging the two urological services in 1949, certain minor changes have been made in the section. Two special clinics for tuberculosis of the genito-urinary system and for sterility and impotence have been very active. Chronic interstitial cystitis has been found to be quite favorably influenced by ACTH and cortisone. This has been given special study by Dr. Albert Paquin of the resident staff. The use of vesical mucosal grafts to bridge defects in the urinary tract is under investigation by Dr. Henry Cleveland and Dr. Robert Spellman. If successful, this method will contribute materially to the improvement of present techniques now used for hypospadias. Dr. E. C. Coats has initiated investigation in the use of ultrasonic energy in the treatment of urinary calculi. Evaluation of radical surgery on extensive carcinomas of the bladder and prostate continues. Perfection of methods for earlier diagnosis in malignancies of the genito-urinary tract has been continued with Dr. Papanicolaou. Detailed studies on patients with chronic recurring calculi of the urinary tract have been carried out with Dr. Ephraim Shorr of the Endocrinology Section of the Department of Medicine.

Dr. Artusio, in charge of anesthesia, has been assisted by a resident staff of four, nineteen nurse anesthetists, and three student nurse anesthetists. Dr. Benjamin E. Marbury and Dr. Marjorie A. Crews completed their residency in anesthesiology December 31, 1950. Dr. Marbury has remained on a senior basis. The research on rectal pentothal during the past year has made a significant contribution to the field of pediatric anesthesia. A group of anticurare compounds were developed to give the anesthetist a safe and effective antidote for any level of curarization. The total number of anesthetics given by this section in a twelve-month period has increased by 50 per cent over the past three years. During 1950, 9,590 anesthetics were administered, with 57 complications, 0.6 per cent. Twenty-seven of the complications were pulmonary, of which half were directly associated with anesthesia, but there were 20 per cent fewer pulmonary complications in 1950 and in 1949. Seven postoperative deaths out of the total of 75 on the pavilions were related to anesthesia, three occurring on the operating table. Undergraduate instruction in anesthesia is so designed as to give the fundamental theory of anesthetic agents and techniques in the third year. The fourth-year lectures are of a more practical nature, with demonstration of the various practical techniques. Two full-time elective courses in anesthesia are offered each month to the fourth-year students.

Dr. Pearce, in charge of surgical pathology, has had Dr. John Ellis and Dr. Stephen Vogel of the Department of Pathology as his immediate assistants since July 1, 1950. During 1950 a total of 8,262 specimens were examined by this section, as compared with 7,646 in 1949. Of these, 1,412, or 17.1 per cent, were from patients with malignant disease. By the careful examination and study of specimens removed at operation, the surgical pathologist establishes the final diagnosis. Therapy and prognosis are often determined by his findings. Instruction in this field is of first importance to both graduate and undergraduate students. For the medical students, a formal course is given in the fourth year. Members of the resident staff, both interns and assistant residents, rotate through this special field. During 1950, twenty-five members of the house staff participated in the work of this section, seventeen from the Department of Surgery and eight from the Department of Pathology.

For the Dental Clinic, 1950 was a year of consolidation after its clinical and administrative reorganization in 1949 under Dr. Egan's supervision. Numerically, the service almost doubled its patient load. Consultations from other departments increased decidedly, as did the number of admissions to the surgical pavilions of patients requiring operating room facilities for their dental surgery. Teaching expanded to include instruction for the resident



staff of general surgery in the treatment of fractured jaws, lectures to radiology students on oral anatomy and dental radiology, and instruction to the students of dental hygiene on oral pathology. The program for training dental hygienists was increased to seventy students. A film library of dental radiographs of special interest has been established, and meetings of the staff are held each month to discuss cases.

Under Dr. Hanson's direction, Physical Medicine gave 27,756 treatments to 2,647 patients during 1950. The activities of this section show a definite increase in rehabilitation work among the hospital's in-patients. This includes both the poliomyelitis and other services, and has been aided by the addition of a new and fully equipped room and provision for extra physiotherapeutic assistance during the polio season. The expenses of the added personnel have been met by the National Foundation for Infantile Paralysis. Early and more complete recovery is being accomplished by a careful rehabilitation program. Rehabilitation means maximum recovery in patients who have undergone severe trauma, operation, or disease. These cases include fractures, polio, arthritis, orthopedic disabilities, and degenerative diseases of the nervous and circulatory systems. Effort is made to recover lost muscle function, locomotion, and stability. This is begun while the patient is in the hospital and continues in the Out-Patient Department when necessary. It covers muscle re-education in the therapeutic pool, exercise for coordination and balance, to help build up the muscles necessary to walking, and work in the special rehabilitation gymnasium, where instruction is given in activities common to daily living.

The Department of Surgery maintains fourteen separate out-patient clinics whose integration and organization require constant supervision and revision in order to maintain patient care at maximum efficiency. During 1950, 20,000 new patients were seen in these clinics for a total of 100,400 patient visits. In the minor surgery clinic, 1,318 operations were performed and 570 plaster casts applied.

The Laboratories for Surgical Research have been under the immediate direction of Dr. Child, assisted by Dr. O'Sullivan. The facilities have been utilized to their capacity by all sections of the department. The following studies were pursued during the year: methods of bridging defects in the esophagus, revascularization of the myocardium, the effects of arterio-venous fistulae on myocardial ischemia, variations in blood vessel anastomosis, preservation of blood vessels for grafts, surgical approach to cardiac valves, viral infections of the myocardium, experimental cirrhosis of the liver, the effect of portacaval shunts on liver function, obliteration and resection of the portal vein, alterations in body fluids and electrolysis, anticurare substances, homologous skin transplants, methods of evaluating the vascularization of skin grafts, and vesical mucosal grafts for defects of the urinary tract. Dr. Mary Anne Payne of the Department of Medicine has been working with Dr. Child and Dr. O'Sullivan on liver disease studies. They constitute a team for evaluating and treating patients throughout the hospital who may be benefited by surgical therapy. The surgical metabolism unit, headed by Dr. Child and Dr. Helena Gilder, and assisted by Dr. Arthur Gore and Dr. Roy D. McClure, Jr., this past year has pursued exhaustive studies on total body water, extracellular fluid, plasma volume, sodium, potassium, and other blood constituents. They have carried out these studies on a number of severely ill patients. Dr. William A. Cooper, in conjunction with Dr. Papanicolaou of the Department of Anatomy, has developed a more adequate method for diagnosing cancer of the stomach. The Department has encouraged and fostered a blood vessel bank which is under the supervision of Dr. Edward Keefer and Dr. Kenneth Hui. This project is sponsored by the New York Society for Cardiovascular Surgery and is supported by funds from the New York Heart Association. Two members of the resident staff, Dr. Gore and Dr. McClure, were given the opportunity of special research assignments in the rotation of their training this year. Original research by members of the student body has also been encouraged.

A total of \$132,178 was received by the Department during 1950 to support its research program. Grants from the U.S. Public Health Service amounted



to \$44,382 of the total. Other contributors included the New York Heart Association, the American Cancer Society, the Childs, James, Given, Astor, and Lasdon Foundations, the Marguerite S. Davis Estate, the New York State Association for Crippled Children, Inc., Lederle Company, Marie H. Glemens, Inc., Colorado Fuel and Iron Corp., and a number of individual contributors.

During the year several members of the resident group were called for active military duty. It is anticipated that military requirements will cause us to lose several more, but it is hoped that at the end of another year we will begin to see these men returning to our service. It is the opinion of Dr. Frank Glenn, the head of the Department, that surgical training which produces the knowledge to give the best care possible to the military and civilian is of equal importance in our schedule of preparedness to the production of adequate military equipment for a possible all-out war. To ensure our preparedness, therefore, every effort should be made to maintain our medical training programs at full capacity until such time as we are forced to a total war basis.

#### INTERNSHIPS

The cooperative plan for appointment of interns was modified for the year 1951, and the acceptances were released by the hospitals on February 20, 1951. Sixty-seven members of our class which graduated in June, or 78 per cent, will intern in hospitals affiliated with medical schools; nineteen, or 22 per cent of the class, elected to intern in hospitals not affiliated with medical schools. The class was placed in forty-one different hospitals including one each in the Army and Navy.

In December, 1950, an *ad hoc* committee was established under the sponsorship of the Committee on Internships and Residencies of the Association of American Medical Colleges for conducting an experiment on the method of appointment of interns. The new committee was composed of representatives from the American Catholic Hospital Association, the American Hospital Association, the American Medical Association, the American Protestant Hospital Association, and the Association of American Medical Colleges, with liaison members from the governmental agencies concerned with internships. This committee was set up for the purpose of conducting a trial run of the plan for matching the preference of students and hospitals in internship appointments and was financed by funds supplied by the Association of American Medical Colleges. This National Inter-Association Committee on Internships conducted its experiment completely independently of the regular cooperative plan for intern appointment. At a meeting on May 23, 1951, the National Inter-Association Committee on Internships reviewed the results of the experiment this year. The trial run demonstrated that this proposed matching system could be operated successfully as far as the mechanics are concerned. It was recommended, therefore, that the matching plan be adopted as the official method of internship appointment for 1952. At the time of the writing of this report the vote is not in from the various institutions involved, so that it cannot be stated whether or not it will be the method of choosing of interns for the coming year.

The plan of making internship appointments by matching the preference of a student for a hospital with the preference of a hospital for that student has several advantages. It is to be hoped that it may be tried during this coming year. The Medical Board of the New York Hospital has voted to approve this method of choosing of internships for a one-year trial run.

At the meeting of the Council on Medical Education and Hospitals of the American Medical Association held in Atlantic City in June, 1951, the decision was reached to reduce the total number of internships in the approved hospitals in the United States by a quota system. During the past few years the number of approved internships has greatly exceeded the numbers of medical students to fill them. Since there have been nearly twice as many internships offered as there have been available applicants, no system of choosing interns could satisfy all of the hospitals. From a number of quarters decided protests have been made against the method of reduction of internships proposed by the

Council on Medical Education of the American Medical Association, because it has failed to take into consideration the approval of the various internships on the basis of their value for teaching. It remains to be seen whether some modification will be brought forward. Needless to say, it is extremely important that the graduates of our medical college receive internships that will provide first-rate teaching experiences. The value of a high-grade undergraduate training to the medical student can be markedly reduced if he does not have an opportunity to continue in hospital training dedicated to education as well as to service. One of the great defects of our internship training has been that many hospitals have used it as a method of getting service in the hospital without providing a good experience in medical education. It would seem logical that the best method of reducing the total number of internships would be to do it on the basis of the merit of each of the services in terms of the teaching provided. This problem is a difficult one because it requires a great deal of time and judgment to properly evaluate all of the internship opportunities in this country. Some day, however, this must be done if the problem is to be solved in the most effective manner.

#### COLLEGE MAINTENANCE

The activities of the Business Office of the Medical College for the year ended June 30, 1950, have continued under the supervision of our Business Manager, E. K. Taylor. The figures used are, of necessity, estimates. Final figures will be published in the treasurer's report at a later date.

*Finance.* The total dollar volume for the twelve-month period will exceed the same figure for the last year by approximately \$120,000 for a total of \$2,800,000. Appropriations from University funds for the year were \$1,282,440. This was an increase of \$28,000 over the previous year.

It is anticipated that the estimated deficit of \$16,815 will be more than met through savings in departmental appropriations. In addition, supplementary appropriations amounting to \$17,000 requested during the year will likewise be met through additional earnings in administrative overhead on research funds. Overhead charges now amounting to approximately \$80,000 per year represent a considerable income from this source but do not as yet equal the estimated cost of handling research funds.

Comparative figures are as follows:

	1949-50	1950-51 (Estimated)
Academic budgets.....	\$ 966,557	\$ 984,317
Administrative.....	104,420	112,060
Library and service accounts.....	160,246	161,406
Administrative restricted funds.....	23,364	24,657
Special funds for research.....	152,147	155,000
Restricted research funds.....	738,948	846,000
Government contracts and grants.....	547,604	526,000
	<hr/> \$2,693,286	<hr/> \$2,809,440
Number of orders placed.....	7,454	8,227
Number of checks issued.....	18,213	18,326
Total number of employees (5-31-51).....	625	608
Employee turnover.....	42%	43%
Total payroll (12 months).....	\$1,800,212	\$1,818,950

*Social Security.* The Social Security program went into effect on January 1, 1951. Eighty-six per cent of our employees are now covered under this plan, and it is expected that this percentage will show a marked increase during the next year.

*General Maintenance.* Few major repairs were necessary during the year. Service lines and other facilities are constantly being checked and minor repairs

made when necessary. Extensive alterations were made in the Department of Physiology to provide additional space in their classrooms. In addition, a combination fluoroscope X-ray unit was obtained through Navy Surplus Property and made available for their use. A minor change was made in the pathology classroom to provide for additional tables. A large laboratory was modernized in the Department of Bacteriology. Otherwise, alterations were limited to minor changes.

*Veterans Affairs.* There was a decrease in the number of veterans (178) in training as contrasted with last year (236). This is shown in the following tabulation:

	1950-51	1949-50
Number of veterans in training.....	178	236
Regular students.....	137	184
Graduate students.....	7	10
Special students.....	34	42
Total Veterans Administration.....	\$75,012.11	\$106,060.03

*Student Housing.* The temporary dormitories used by the students were transferred to the University by the federal government as of December 31, 1950. By action taken in the last session of the State Legislature permission to use these buildings has been extended to July 1, 1954. It is sincerely hoped that permanent housing will be provided by that time.

#### SUPPORT ACTIVITIES

During the year July 1, 1950, to June 30, 1951, the Medical College has received \$828,665.91 in restricted gifts for research and education from private sources and \$467,046.15 from the federal government. This makes a total of \$1,295,712.06. In the reports of the work of the departments reference has been made to the various sources of these funds—grants from private donors, industrial concerns, foundations, and governmental agencies. A sum of about \$14,000 was provided from the National Heart Institute of the U.S. Public Health Service for the teaching of cardio-vascular diseases and, as in the previous year, we have received about \$25,000 for the teaching of neoplastic diseases from the National Cancer Institute of the U.S. Public Health Service. The New York City Cancer Committee has provided a sum of \$12,000 for teaching of cancer in our institution. At the meeting held late in April, 1951, the Board of Trustees of Cornell University announced that a sum of \$408,000 has been allocated to the Medical College from the Greater Cornell Fund. This includes the \$200,000 (approximately) raised by the Medical College alumni of which \$129,000 was earmarked for the Medical College. The Cornell University Medical College Alumni Fund totaled \$10,219 in addition to the funds given to the Greater Cornell Fund.

It will be noted that the total sum received from outside sources for research and education just about equals our total unrestricted income from other sources, which is for 1951-52 estimated to be about \$1,268,000. Furthermore, our outside support for research and education approximate that of last year. Over the years we have developed an over-all policy concerning grants for research and special projects. In the first place, we have refused to take any money that we cannot spend to good advantage, both for the donor and the institution. Secondly, the grant must not have restrictions attached that remove the expenditure from our jurisdiction. Third, money obtained from grants for special purposes should not be so great that it will put an unnecessary load upon other portions of the budget. Many times it costs our institution money to expend grants because they may not have overhead or, if overhead is provided, it is insufficient to cover our costs. Fourth, we must avoid letting the total amount of research activity in the institution become so great that it will interfere with our fundamental job—patient care and medical education. We have the problem of teaching, research, and medical service in this institution; we must be very careful to see that the teaching and the service are not

interfered with by too much research activity. Good administration will keep the matter in balance. In the fifth place, if all the outside money provided for research and special teaching projects were withdrawn suddenly, we ought still to be in a position to continue to carry out our responsibilities. In accepting government funds, we have been aware at all times that we must keep our operation so organized that we can withstand the possibility of having these funds withdrawn suddenly. In the sixth place, we have sought money to support the projects in which members of our staff have had a real interest. In other words, we have not gone out to obtain funds and then assigned the job of spending them to certain members of our staff. In the seventh place, the expenditures of funds and their proper management must rest in the hands of the department in which the work is being done, i.e., the department head is responsible for efficient prosecution of the work and obtaining reliable results. These component portions of our over-all policy have not been listed in order of their relative importance, but they form a part of a total picture which must always be kept completely focused in our attention.

It is instructive to look at the growth in the funds restricted for research that we have raised. In 1939, they totaled about \$170,000; in 1943, \$350,000; in 1946, \$560,000; and in 1950, \$1,153,000. We are proud that as a result of the expenditure of these funds, there have been significant research findings and publications. There has been built up a confidence in our institution that is a most precious possession. Under the Joint Agreement, Cornell University through its administrative officer, the Dean of the Medical College, is responsible for education and research in our joint institution. The University should jealously guard this prerogative, because a division of this responsibility between several administrators would lead to a local competitive situation within our institution, a lack of uniformity of administration, and a loss of confidence on the part of outside donors.

At a meeting held in New York City on May 16, 1951, the National Fund for Medical Education was announced publicly. At this meeting the speakers included Herbert Hoover, President James B. Conant of Harvard, President Harold E. Stassen of the University of Pennsylvania, Dr. Elmer L. Henderson, President of the American Medical Association, and Dean Hinsey. S. Sloan Colt presided at this meeting. This marks a real step forward in the advancement of private voluntary support for medical education in all of our medical schools. It is expected that each one of the medical schools in the United States will receive a sum of money from this Foundation sometime during this summer.

During the first part of the year, J. B. McKee Arthur, Jr., a member of the staff of Asa Knowles, then Vice-President for University Development, was assigned to the Medical College for the purpose of continuing the program of fund raising for the support of the Medical College. In the spring, Mr. Arthur was transferred to Ithaca to carry on work in the development there.

#### ALUMNI ACTIVITIES

For the year ended April, 1951, Dr. William Cassebaum, '31, served as president of the Cornell University Medical College Alumni Association. The other officers were: Dr. Paul Reznikoff, '20, Vice-President; Dr. Alphonse E. Timpanelli, '36, Secretary; Dr. Henry A. Carr, '35, Treasurer. Dr. Cassebaum and Dr. Horace Baldwin, '21 were alumni representatives on the Medical College Advisory Committee. Miss Mary E. Gleason has continued as full-time executive secretary of the Association in the College. Dr. David N. Barrows, '12, Dr. Willis M. Weeden, '19, and Dr. Edward F. Stanton, '35, again edited the *Alumni Quarterly* in a very effective manner.

Dr. E. Cooper Person, '35, served as chairman of the 1951 Cornell Medical College Alumni Reunion Day held on April 20 and 21. On Friday, April 20, the day was given over to a series of clinics and conferences and that evening Dr. Eugene H. Stead, Jr., Professor of Medicine at Duke University School of Medicine, gave the tenth annual Walter L. Niles Memorial Lecture on the topic, "Congestive Heart Failure." This was presented before a capacity audience in the auditorium of the Medical College. On Saturday, April 21, the

morning scientific program was presented by Dr. Harry H. Gordon, '29, Dr. William D. Holden, '37, and Dr. Austin Smith, editor of the *Journal of the American Medical Association*. Dr. Connie M. Guion, '17, was presented the Third Annual Alumni Award for her outstanding contributions to medicine by Dr. Cassebaum. The award was another magnificent scroll. Dr. Guion gave the Annual Alumni Lecture on the topic, "Medicine on the Wing."

At the annual business meeting held April 21, Dean Hinsey reported on the activities of the Medical College and introduced Dr. Dayton J. Edwards and Dr. Lawrence W. Hanlon, '38, and E. K. Taylor who, in turn, briefly reviewed the various aspects of the college operation. The following officers were elected for the coming year: Dr. Paul Reznikoff, '20, President; Dr. Irving S. Wright, '26, Vice-President; Dr. Mary Ann Payne, '45, Secretary; and Dr. Henry A. Carr, '35, Treasurer. Again, the Medical College entertained the alumni at luncheon held in the Nurses Residence. In the afternoon the visitors went to see various exhibits about the College, and a program was presented by the services at the Bellevue Hospital. About five hundred attended a dinner dance held at the Waldorf Astoria Hotel. Dr. Cassebaum and Dr. Reznikoff have been appointed as alumni representatives on the Medical College Advisory Committee for the coming year.

On September 22, 1950, the Alumni Association gave its annual reception for entering students and entertained the second- and third-year classes at afternoon teas this past spring. Again, I wish to express my gratitude for the continuing support and cooperation I have received from our alumni.

#### MEDICAL EDUCATION IN TIME OF NATIONAL EMERGENCY: NEEDS AND POLICIES

The Cornell University Medical College shares with the remaining seventy-eight medical colleges in this country many problems that are common to all. In my report of previous years, I have indicated that it is my conviction that the Medical College needs much increased endowment in the amount of ten to twelve million dollars and a residence for our students. During this past year, I have documented in a communication to Acting President T. P. Wright my evaluation of where the financial needs of this institution exist. As a matter of fact, there is no division of our Medical College which does not need greater support. In my report for last year, I stated the needs for additional space that exist in the Departments of Radiology, Pharmacology, Biochemistry, Surgery, and Medicine. Because of the mounting costs of building and alteration, and the increasing difficulties of obtaining necessary material, such structural alterations will be postponed necessarily to some future date. It will be necessary for us to adapt our operation to the space now available. In my opinion, however, it is most urgent that a residence be provided for the students in this institution. The present temporary housing facilities must be replaced by July 1, 1954. If the Hospital for Special Surgery starts on its building program sooner, the one building located on 70th Street across from the Lying-In Hospital will be taken away before that time.

During this present academic year, a number of important policies were determined for medical education. Student deferment at the college level will be carried out under a plan recommended by General Lewis Hershey with the unanimous support of six committees made up of recognized and experienced representatives in the fields of agricultural and biological sciences, engineering sciences, humanities, physical sciences, social sciences, and the healing arts. Although this plan has been severely criticized by the public press and by the heads of a few leading universities, it is a workable plan which will meet effectively the requirements for military and civilian manpower over a prolonged period of international tension and danger. It has been warmly endorsed and supported by the Association of American Medical Colleges and by our own institution. A sound program for the deferment of medical students and members of the resident staff and of the Faculty has been worked out along lines which have been widely endorsed by the medical profession.

On February 12, 1951, Dr. Howard A. Rusk presented, speaking as chairman of the Health Advisory Committee of the National Security Resources



Board, a paper entitled "Medicine, Mobilization and Manpower." He made a strong case for acceleration of the medical school curriculum and for a 15 per cent increase in the enrollment of our established medical colleges. The specific goal of 22,000 additional physicians by 1960 above the anticipated production set by the Rusk committee for the medical schools is based upon a series of assumptions that are debatable. Other equally sincere estimates might vary greatly from this figure. The statistical methods relied on by this committee are also open to question. That the medical schools have a great responsibility in helping to improve the health and welfare of the country is not to be questioned. How this can be done is a question which deserves the most thorough consideration by the medical schools, medical profession, other interested civic groups, and governmental agencies. If this country is to prevail over its enemies it will not do so by numbers but by the superior quality of its educational programs and by its superiority in the field of research and other forms of intellectual productivity. The medical schools must uphold standards of graduating well-trained physicians. We must make every effort to increase numbers, but not at the expense of quality. We have been pursuing this course because we have increased substantially the enrollment of the medical schools in this country for the past ten years by about 25 per cent. The price of general acceleration has proved to be lowered quality of graduates, exhaustion of teaching staff, and serious curtailment of research. It is our duty to push forward our research programs because it would be catastrophic if they were to deteriorate. In the opinion of both the Joint Committee on Medical Education in Time of National Emergency and of the Executive Council of the Association of American Medical Colleges, of which your dean is chairman, acceleration comes at a far greater price than can be justified by existing conditions, and we have recommended that medical schools do not adopt the accelerated program. Here at Cornell we have increased the class entering this fall to eighty-six. We have endeavored to maintain the standards of our program against those changes that will inevitably deteriorate the standard of medical education.

There have been pressures for medical schools to take on additional community responsibilities. Much is being said today regarding the social responsibility of the medical college to its community, in which we believe sincerely. Throughout this report, mention is made of various activities that involve local, state, national, and international relationships with our community. It is my conviction, however, that many medical schools have assumed responsibilities for worthwhile community activities, such as affiliated hospitals and outside clinics, that are being carried out at the expense of the fundamental educational program of these institutions. Our medical colleges are not only faced with financial difficulties, but there is as a corollary to this lack of adequate financial support the lack of sufficient well-trained staff to carry on a first-rate program. In my presidential address before the Association of American Medical Colleges at Lake Placid in October, 1951, I analyzed the problem of the available staffs in the basic medical sciences in all our medical colleges. There is no doubt that there is, at present, a shortage in the number of teaching staff available for our medical colleges in the departments of the first two years, and I firmly believe that the same is true of the last two years. As medical-student enrollments are enlarged in already established institutions and as new medical colleges are being established, this shortage is emphasized even to a greater extent. Medical college faculties and administrators must be on guard that, by increasing their outside responsibilities to the communities in which they work, they may not disperse the activities of their faculties in such a fashion as to injure the standard of work of their institutions both in teaching and research. It is my conviction that the best function that a medical college can perform is to send out into the communities of our country well-trained physicians, trained not only in the science and art of medicine but imbued with the attitude of a strong social responsibility to the communities in which they practice.

One of the great problems that the medical schools of this country have is that the public has not been kept informed of the problems and the needs of medical education. Our lines of communication to the man on the street who ultimately will decide the standard of medical education to be available in this country have been poor. The Association of American Medical Colleges has devoted considerable attention to ways and means to improve public information regarding medical education. During the year a number of articles have appeared in the various magazines. Increased attempts are being made by our medical schools to improve their relations with the public whom they serve. As a matter of fact the communications even with the medical profession and within various departments of medical education have been poor. This is most evident when one talks to people at various conferences on medical education and learns how little is known about various phases of experiments in medical education that have been under way, in some instances, for many years. The survey of medical education which is being conducted under the direction of Dr. John E. Deitrick, a member of our staff on leave, and a full-time staff will do much to improve the understanding of the problems of medical education when the report of the survey is published. In June, 1951, the Cornell University Medical College provided the talent for a series of five radio programs devoted to explaining the education of a doctor from a pre-medical student to a practicing physician. This schedule was as follows: June 11, Joseph Buda, a Columbia University premedical student who has been accepted for Cornell this coming year, discussed why he wants to be a doctor; June 12, Dr. Frederick Flach, a Cornell graduate this year, discussed "First Steps in Becoming a Doctor"; June 14, Dr. Frederick Kirkham, '47, who has just finished his residency in medicine in our Center, spoke on "What It Means to Be a Doctor"; June 15, Dean Hinsey discussed "The Education of a Doctor." I have given eight addresses during the year dealing with the problems of education during this national emergency.

The financial difficulties of many of our medical schools are ones that are shared by their respective teaching hospitals. In our own teaching hospital, the New York Hospital, these difficulties have been great during the past year. After repeated consideration of reports of special committees, the Board of Governors of the Society of The New York Hospital, at its meeting on May 1, 1951, approved the revised deficit budget of the New York Hospital for 1951, and, because of the mutual interest of the Society of The New York Hospital and Cornell University in teaching, training, and research at this Center, requested the Joint Administrative Board to undertake studies of the problem of the reduction of the deficit of the New York Hospital. This study is being carried out under the direction of Dr. Stanhope Bayne-Jones, the President of the Joint Administrative Board. The deficit of the New York Hospital is of great concern to the Cornell University Medical College because if the financial difficulties experienced by the Hospital require a change in the type of service that is available in the Hospital, it will have a marked effect upon the educational program of our Center. Due to the present inflationary spiral, these financial difficulties are common to all of our private teaching institutions. In the state and publicly supported medical colleges there is access to the tax dollar, and budgets there have been increased to help meet the depreciated value of the dollar.

The American Medical Association and its various component societies have been making an attack on the system utilized in a good many of our medical colleges and teaching hospitals by which fees from professional services are assigned by physicians on the staffs to funds for education and research and for hospital income. An important example is the Hess Report and statements and resolutions adopted by the house of delegates of the American Medical Association at their meeting held in San Francisco in June, 1950. The American Medical Association has regarded this practice as illegal corporate practice of medicine and unethical conduct of physicians. This type of attack from organized medicine has made the development and continuation of the full-time system of medical education, which has been so valuable in this country,

extremely difficult. As yet, the medical schools have continued along the lines which have developed and proved so satisfactory in recent years.

#### CIVIL DEFENSE

At its meeting held on January 19, 1951, the Joint Administrative Board voted to approve changing the designation of the Advisory Committee Catastrophe Unit to Advisory Committee on Civil Defense and to recommend this change to the Board of Governors of the New York Hospital. Dr. Henry Pratt, Director of the New York Hospital, has served as chairman of this committee during the year. The civil defense activities in our Center have been organized with a central Committee on Civil Defense with representatives from the New York Hospital and our Medical College. Thirteen subcommittees have held meetings during the year, and a great deal of progress has been made. Assistant Dean Hanlon has served as chairman of our local committee, which has cooperated with the New York State Civilian Defense Commission in the providing of education in the management of atomic blast injuries. Lectures have been provided for medical students and house staff so that the proper training has been carried out. Dr. Hanlon has outlined the main topics in atomic, bacteriological, and chemical warfare which need attention in our medical school curriculum in order to ensure that our students are aware of the medical problems which would result from major catastrophes. This outline has been so prepared that the various departments concerned have been informed of the topics they are to cover. As a matter of fact, the major portion of this program has already been in operation in our regular curriculum. Nearly every department in our medical school is involved in some way or another in the coverage of this material.

#### ACTIVITIES AT THE NEW YORK HOSPITAL-CORNELL MEDICAL CENTER

The third Service Anniversary Award dinner, given jointly by the New York Hospital and our Medical College under the auspices of the Joint Administrative Board, was held on the evening of Tuesday, November 14, 1950, to honor all those in our institution who in 1950 reached their fifteenth or twenty-fifth year of service. Dinner was held in the dining room of the Nurses Residence and was attended by 147 persons, including representatives of the Board of Governors of the Society of The New York Hospital and Trustees of Cornell University.

In the agreement made on June 16, 1950, the Sloan-Kettering Division of the Cornell University Medical College was established. In this agreement provision was made for a coordinating board of the division to be made up of representatives of the four different parties to the agreement. During this past year, this board has been made up of the following representatives: Cornell University, Dr. C. W. de Kiewiet and Arthur Dean; the Society of the New York Hospital, John Hay Whitney and Henry S. Sturgis, with Hamilton Hadley and William H. Jackson as alternates; Memorial Center for Cancer and Allied Diseases, Reginald Coombe and Mrs. Albert D. Lasker; and Sloan-Kettering Institute for Cancer Research, Frank A. Howard and Louis L. Straus. One meeting of this board was held during the year.

During the present emergency, some members of the staff of our joint institution and its component parts will be absent to carry out governmental service. Effective as of July 1, 1950, until terminated by action of the governing boards, the Joint Administrative Board of our Center established and will maintain a Defense Service Roll on which will be carried the names of all the members of the professional and teaching staffs of the Society of The New York Hospital, Cornell University Medical College, and Cornell University-New York Hospital School of Nursing who enter upon governmental service in connection with the national defense program. A set of recommendations were formulated with a view to establishing uniform policy for the different components of our Center.

Under the direction of Dr. Claude Forkner, Professor of Clinical Medicine, and on the recommendation of Dr. David P. Barr, Professor of Medicine, there

was established early this year a Clinic for Practicing Physicians who refer patients to the Out-Patient Department of the New York Hospital and for other physicians of the district of this Medical Center; in fact, all physicians are welcome to attend. This clinic was jointly sponsored by the New York Hospital and our Medical College and was held every Wednesday afternoon at 5:15 p.m. Programs of special interest to the general practitioner were arranged, and there was a large attendance. The reaction in medical circles was a very favorable one, as evidenced by an editorial which appeared on March 20, 1951, in *New York Medicine*, the official publication of the Medical Society of the County of New York. Funds in the amount of \$4,000 required to meet the expenses for the first year of this clinic were appropriated from the full-time fees fund of our joint institution.

Satisfactory progress has been made in the negotiations with the Hospital for Special Surgery to put into effect, with certain amendments, the basic agreement for affiliation with the New York Hospital, dated April 5, 1949. The Hospital for Special Surgery is proceeding to raise the sum of \$1,500,000 of new capital funds in order to construct the proposed new hospital. In the meantime, a proposed agreement for affiliation at a distance between the New York Hospital and the Hospital for Special Surgery is nearing completion, and it is hoped that in the fall this affiliation will be activated. This will increase our teaching material in orthopedic cases.

The New York Hospital-Cornell Medical Center Research Fund was established as of January 1, 1951, by an appropriation from the special fund of full-time fees for the support of medical research within this Center. In the first appropriation, a sum of \$37,500 was made available for use at the rate of \$25,000 per academic year over the period of January 1, 1951, to June 30, 1952. The Medical Center Research Fund is open to investigators in all departments, both preclinical and clinical, and is administered by a committee composed of the president of the Joint Administrative Board and the dean of the Medical College with such advisers as they may request from time to time. In general, the fund is to be considered for the support of any research projects separately or as parts of a program for which contributions may be available from other sources. It is hoped that the fund may be made most serviceable in aiding early exploratory investigations, or specially desired undertakings at stages at which they may not yet be suitable for more formal presentation and applications to foundations and agencies for larger grants.

During the past year the program worked out for the allocation of offices in the New York Hospital for the conduct of private practice by staff members in connection with other duties in our Center has worked out quite satisfactorily. The Committee on Doctors' Offices has recommended the allocation of offices in the New York Hospital for the year July 1, 1951, to June 30, 1952, to three members of the staff in the Department of Medicine, two in the Department of Obstetrics and Gynecology, one in the Department of Pediatrics, and fourteen in the Department of Surgery. These members of our staff may be considered as working under a system of "geographic full time," and the provision for this type of service was outlined in my report of last year.

In a memorandum dated April 24, 1951, there was outlined the program adopted by the executive committee of the Board of Governors in the New York Hospital at a meeting held on April 17, 1951, which provides for the establishment of a five-day week in the departments of the New York Hospital. It is a very difficult problem for the Medical College to go on a five-day week because of the fact that students are in class here for six days. The action taken by the New York Hospital, however, creates difficulties for us. A number of the department heads have had difficulties in maintaining the services of the Hospital at a satisfactory level. As yet we have taken no action in the Medical College for the adoption of a policy for the five-day week.

A new program for comprehensive medical care and teaching and continuation of the pilot clinic for broader medical care of the New York Hospital-Cornell Medical Center will be supported by grants in the amount of \$344,752 made by the Commonwealth Fund to Cornell University Medical College.

Approximately \$204,000 will be for the experiment in teaching and practice of comprehensive medicine and \$140,000 for the clinic for broader medical care which the Commonwealth Fund has supported during the past five years. These new grants will provide funds over a period of three years, starting July 1, 1951. The first year will be used for a survey and testing of plans. The complete program will begin in July of 1952.

The purpose of the program for experimentation in the practice and teaching of comprehensive medicine is to provide continuous medical care for a portion of the patients who visit the out-patient department of the New York Hospital and to make it possible for senior medical students, under supervision of the doctors, to have a natural association with the same patients over a relatively long uninterrupted period of time. The point of view will be to regard the patient's problem in its entirety and not as one limited to immediate diagnosis and treatment. Families as well as individuals will be cared for through their visits to the clinic and through extension of services in their homes so that the medical relationships will be continuous and comprehensive and not broken up by episodic events of illness or hospitalization.

Dr. David P. Barr, Professor of Medicine in the Medical College and Physician-in-Chief of the New York Hospital, will be in charge of this program. Although it is centered in the Department of Medicine, it will also bring into close association the Departments of Pediatrics, Psychiatry, and Public Health and Preventive Medicine. Other departments will be represented, and Nursing and Social Service will participate. The program will develop relations between the Hospital and its most directly related community, the Kips Bay-Yorkville District, and will foster relations between our Center and the physicians of the community.

The curriculum for senior students will be changed to provide in 1952 a continuous period of 22½ weeks for each student in medicine, pediatrics, and psychiatry. Up until now, this time has been broken up in specialized blocks of about eight weeks' duration. This change will give the senior medical students an opportunity for prolonged experience with patients, their families, and the doctors concerned with developing continuous general medical care and clinical teaching on a comprehensive basis.

It is a pleasure to acknowledge the continued cooperation and friendship of Dr. Stanhope Bayne-Jones, the members of the Joint Administrative Board, and the officers of the Society of The New York Hospital. My responsibilities of an extracurricular nature have continued to be great, and again I have been extremely dependent during this past year on the members of the staff here in the Medical College. I should like also to express my deep gratitude to you, the members of the Board of Trustees, the Medical College Advisory Committee, the alumni, and the staff for support and cooperation.

JOSEPH C. HINSEY  
Dean of the Medical College



APPENDIX XIII  
REPORT OF THE DEAN OF THE NEW YORK STATE  
VETERINARY COLLEGE

*To the President of the University:*

SIR: I have the honor to report herewith on the activities of the New York State Veterinary College for the fiscal year ending June 30, 1951.

THE STAFF

There have been few changes in the staff membership during the year except in the ranks of assistant and intern where such changes are expected. Dr. Carolyn Sprague, Associate Professor of Physiology, has resigned, effective at the end of the period, and her successor has not yet been appointed. Dr. Ellsworth Dougherty, Assistant Professor of Poultry Diseases, was transferred from Ithaca to become the first director of a newly established laboratory for the study of diseases of ducks at Eastport, N.Y., and Dr. Malcolm C. Peckham succeeded to the Ithaca position. Dr. Howard E. Evans was appointed assistant professor of anatomy at the beginning of the year, becoming the first incumbent of a newly created position.

A considerable number of the younger staff members, and a few of the older ones, are reserve officers of several branches of the armed forces. Because veterinary students are in a deferred category, under Selective Service, we do not expect that we will lose the services of many of these persons to the military. Several members who were deferred during the last war and have not had active service may be called for service, but even of these it is thought that the key men can be retained.

The scientific or professional staff now numbers forty-eight persons. Nine of these are stationed outside Ithaca in the several diagnostic and service laboratories that are administered by the College. Eight others, stationed in Ithaca, are fully engaged in service activities and do little or no teaching. Twenty-seven of professorial rank are concerned with teaching and research in Ithaca, and these are assisted by sixteen others who hold lesser ranks. The Veterinary ROTC officer, Colonel W. E. Jennings, is not included in this summary, although he teaches one major subject in the veterinary curriculum, food hygiene, in addition to his purely military subjects.

The morale of the staff is very good. It was considerably improved in April by the passage of the state "bonus" act, which materially improved the economic position of all employees. Several key men received flattering offers of employment elsewhere during the year, but we were able to hold all of them. The salary bonus will be of great help in meeting this type of competition.

THE STUDENTS

The undergraduate enrollment during the year was 193. Only two students were dropped at the end of the year for scholastic deficiency, both of these being first-year men. Forty-seven were graduated in June with the D.V.M. degree. Since fifty new students have been selected for admission next fall, next year's enrollment should be almost exactly the same as for this.

Loss of students because of military service is not anticipated, because it is the policy of Selective Service to recommend their deferment until graduation. Furthermore, more than two-thirds of all veterinary students are enrolled in the Advanced Veterinary ROTC unit in the University. The situation might be changed if the country became engaged in an all-out war, but this contingency seems less likely now than it did a year ago.

There was no difficulty in placing the 1951 graduates. As of Commencement Day, forty-three had accepted positions, and only four were undecided about employment. Thirty-eight were going into private practice, four into teaching and research, and one into the armed forces.

#### THE ADMISSIONS SITUATION

The pressures for admission to all veterinary schools of the country are gradually easing. The pressure on us has eased less than on most of the other schools, yet it has reduced in our case by more than 50 per cent from that of the peak year, 1947. The reduction in numbers of applicants is due to two obvious factors, and perhaps to others as well. The obvious reasons are the completion of the veterans' training program and the opening of seven new veterinary colleges in various parts of the country. There were 307 completed applications for admission to this college for next fall.

Prior to 1934 this College had been able to accept practically all who could meet the entrance requirements, and, even so, most of the classes were smaller than we would have liked them to be. Since that time we have had from three to fifteen times as many applicants as we could accommodate. Until 1944 the size of entering classes was limited to forty students. In 1945 and 1946, forty-five new students were accepted. Since 1947, fifty new students have been accepted annually. The Faculty is practically unanimous in believing that more students than this cannot be taught, particularly in the clinical sciences, without reducing the quality standards that we have always endeavored to maintain.

The number of qualified applicants each year since 1934 is shown in Table I:

TABLE I. ADMISSION BY YEARS.

<i>Year</i>	<i>Total Applications</i>	<i>Accepted</i>	<i>Year</i>	<i>Total Applications</i>	<i>Accepted</i>
*1934.....	116	40	†Nov., 1943.....	208	40
1935.....	166	40	1944.....	180	40
1936.....	240	40	1945.....	186	45
1937.....	276	40	1946.....	434	45
1938.....	272	40	1947.....	752	50
1939.....	328	40	1948.....	632	50
1940.....	389	40	†1949.....	361	50
1941.....	359	40	1950.....	391	50
†June, 1942.....	322	40	1951.....	307	50
†Feb., 1943.....	155	40			

\* Selective admissions begun.

† Accelerated wartime classes.

† Two-year preveterinary requirement became effective.

The national shortage of veterinarians was discussed in last year's report. It was reported that substantial numbers of New York boys in each graduating class are being attracted outside the state by the lure of better opportunities than they find at home. This has occurred during every year of the last decade. This year, for example, of the forty-three who, on Commencement Day, had made decisions as to their future work, twenty-five were locating in New York State and eighteen were going elsewhere. About 80 per cent of these boys were born and reared in New York.

New York State is not seriously short of veterinarians, but it could use more than it now has. It cannot hope to acquire a substantial increase in numbers until the needs of outside areas are better met. The establishment of more schools in other areas was what was needed, and this has now been done. The seven new schools, which raise the total number to seventeen, have not yet had time to develop their impact on the situation. Only three graduated classes in 1950 and five this year. In 1951 all will begin contributing

members to the profession. About four times as many students are studying veterinary medicine now as in 1930, and about twice as many as in 1940. It is obvious that the process of catching up with the demand is in full swing. Competent observers believe that we now have enough schools to supply the needs of the country, but this goal cannot be reached until the latter part of the present decade. When the needs of other states are more fully met and the attractions to New York boys to locate elsewhere are removed, we believe that the present number of annual graduates from this College will be ample to satisfy the needs of our own state.

#### PLANS FOR A NEW PHYSICAL PLANT

Early in 1951 the superintendent of public works of the State of New York appointed the firm of Isadore Rosenfield, hospital architects of New York City, to prepare plans for the construction of a complete set of new buildings for the Veterinary College. This firm has been at work for several months on the project, and at the time this is written it is taking final form. The entire Faculty, from professors to assistants has been consulted, and good ideas have been obtained from many of the younger men. We have taken advantage of the acquaintance of some of the older members with the plants of other veterinary schools in America and Europe, and, although the plans have not been modeled on those of any other school, certain features have been borrowed. We believe that we have evolved a very convenient and workable plan. It is hoped that the plans can be completed and approved before the end of the present calendar year, so they will be ready in case the next legislature agrees to provide the building funds. It is not possible to make an accurate estimate of costs at present, but it is believed that an appropriation of about \$5,000,000 will be needed. Since the School of Industrial and Labor Relations is expected to utilize part of the present plant of the Veterinary College, and since that school is now housed in temporary wooden structures which will not last many more years, there is pressure behind the movement to supply the new plant for the Veterinary College in order to make room for the contemplated move of the School of Industrial and Labor Relations.

#### THE RESEARCH LABORATORIES FOR DISEASES OF DOGS

These laboratories, which were mentioned in last year's report, were completed during the past year. Early in January they were dedicated by suitable ceremonies, featured by a symposium on virus diseases in the forenoon, the unveiling of plaques to the donors and inspection of the laboratories in the afternoon, and a dinner for the donors in the evening. At these exercises it was announced that the original goal of \$250,000 for the support of this work had been achieved. About one half of this total was expended for the buildings, and the remainder was kept for the support of the research work. Later it was decided to raise additional money for continuing support, and substantial increases in the fund have been secured.

The fund raising was undertaken by the Office of University Development under the capable and enthusiastic direction of Vice President Asa Knowles until his departure to become president of the University of Toledo early this year. The work has been continued by the new Vice President for University Development, W. E. Emerson, who has also evinced much interest in it.

The proposal to establish a laboratory to study the diseases of dogs struck a responsive chord with a great many people in this country who love dogs and have felt that the study of the diseases to which they are susceptible had been neglected. All veterinary schools in this country, and most of those of the entire world, are governmentally supported. The limited funds that have been available for research on animal diseases have been directed by legislation or implication to diseases of the food-producing animals and the work horse. Very little has ever been spent on other species. We now have a laboratory supported by donations from interested organizations and individuals such as

does not exist anywhere else in the world. The work on dog diseases will in no way supplant any work that we have been doing in the past. On the other hand it supplements our other work, since discoveries made on dog diseases may very well prove to be directly applicable to similar diseases of other species. Furthermore, the dog and cat, common farm pets, unquestionably play a role in the dissemination of some diseases of the food-producing species.

The dog disease laboratories are a part of our Virus Disease Research Institute, which was set up several years ago and is now in full operation. In these laboratories the techniques of the new science of virology are being applied to animal diseases. There is no doubt that many diseases formerly thought to be caused by bacterial agents are essentially virus diseases in which bacterial complications frequently occur. Work on such diseases of dairy cattle and swine is under way, and some very promising results have been achieved.

#### RESEARCH ACTIVITIES

In this brief report no attempt will be made to deal fully with the subject of research. From its earliest days the research tradition in this College has been strong, and the publications of the staff of the College have made it well known all over the world. Only very few staff members spend the greater part of their time in research. Most of the research is done by members whose teaching and service activities consume the greater part of their time. On the other hand, there are hardly any who do not have one or more research projects which they pursue as actively as their time will permit.

The range of topics under investigation is fairly great. Most of these researches are directed toward the solving of immediate practical problems, since pressures from farmers and livestock owners are reflected in the earmarking of a major part of our research funds for work on specific diseases. Funds for fundamental research in the basic sciences are difficult to obtain in the state budget, because they do not have the appeal to lay authorities that is inherent in the practical problems. Nevertheless, we do manage to accomplish a fair amount of basic research.

Most of our research work is supported by state appropriations, but in recent years very considerable support has been obtained from other sources—the armed forces, the U.S. Department of Agriculture, the U.S. Public Health Service, commercial companies, and individuals—in the form of research grants and fellowships.

Our largest state appropriations for research deal with bovine mastitis, bovine brucellosis and related diseases, bovine infertility, diseases of poultry, and parasitic diseases. Smaller grants support work on digestion and indigestion in ruminants, virus diseases of farm animals, and bovine leptospirosis. Income funds are used to supplement those devoted to some of the projects already named, and they support many minor projects in all departments. Grants from outside agencies and private sources support work on a number of problems that are related to national defense or to human health. Several examples of work will be cited as illustrative of that which is being done.

Infectious canine hepatitis is a widespread, destructive disease of dogs. The mortality among older animals is about 25 per cent. Among young puppies it frequently approaches 100 per cent. The disease is acute. If the animal lives longer than one week it generally recovers completely and is solidly immune thereafter. Heretofore no one has been able to obtain virus from a recovered animal, but it has been known that virus often remained on the premises where such animals lived, because newly introduced animals often developed the disease. Recently one of our workers has been able to show that recovered animals often retain small chronic foci of infection in their kidneys, from which virus escapes in the urine. These animals have no virus in their blood or other organs. The blood is actually highly virucidal, but this action is not effective in destroying the virus in the kidney foci, and the property is not present in the urine. It is now clear that this process is a common one which persists for variable periods after complete clinical recovery. It may

be lifelong in some animals; it has persisted for more than six months in one animal.

This discovery helps to clarify the epidemiology of this disease, and it has raised the question as to how often the same process operates in other animal and human diseases.

A disease of cattle which is now known as hyperkeratosis, or X-disease, was first recognized by one of our staff members about ten years ago. The disease causes serious losses in many herds. It does not appear to spread to neighboring herds, and many experiments have failed to show that it is infectious, although its clinical appearance suggests such a nature. During the last five years this disease has been identified in many parts of the United States and Europe.

Recently one of our staff has been able to show that this disease is the result of an intoxication due to processed foodstuff. The precise chemical substance has not yet been defined, but its general nature is known, and the disease may be reproduced experimentally at will. Eventually the nature of the process will be worked out, and it should then be possible to avoid this disease by eliminating the causative factor or factors from the feed and environment of the animals. Experimentally, it has been shown possible to produce the disease in several species of animals in which it has not been seen spontaneously. The process, pathologically, is essentially the result of epithelial stimulation by an agent which is closely related to, or perhaps is, a carcinogenic or cancer-producing substance. Since it has been shown to be eliminated in the milk of lactating cows, this discovery may have implications for human health.

A new disease was found in Clinton County, N.Y., several years ago; so far it has not been recognized in any other state. It has occurred in Europe, where it is known as a destructive malady. It occurs in sheep and cattle, and is due to a small flat worm, known technically as *Lanceolatum dendriticum* or the lanceolate fluke. This parasite invades the bile ducts of the host and destroys a great part of the liver. How this parasite reached central New York probably never will be known.

Since it was first recognized this disease has been found in five counties in central New York, and it appears to be spreading. This kind of parasite requires a second host to complete its life cycle. Our parasitologists have determined that the intermediate host in this instance is a very small dry-land snail which appears to be widely distributed and numerous in the region. The life cycle is now known. The adult worms in the bile ducts yield myriads of eggs which pass into the intestine and thence on to the ground with the fecal matter. Here the eggs hatch into minute motile forms that seek out the snails in which developmental changes occur. From the snails a form escapes into the soil and then on to the surface of vegetation. Infected grass, eaten by the susceptible hosts, liberates the young flukes, which then migrate to the liver to repeat the cycle.

A recent discovery, in connection with the fluke studies, probably is very significant with reference to the spread of the disease. This is that the common woodchuck or groundhog is an excellent alternate host of this parasite. It is probable that this species, to a far greater extent than sheep and cattle, is responsible for the spread of the disease to an ever-widening region. Destruction of woodchucks, which are undesirable in farming regions for other reasons, probably would delay the spread of this disease. If the disease is ever to be eradicated from regions already infected, some means of destroying the intermediate host, the snail, will have to be found. Work on this aspect of the problem is now under way.

Most of the research work under way in the College is not so dramatic or so easily explained as the examples given. Progress is being made on methods of dealing with many other diseases. The sulfa drugs and the antibiotics have provided specific remedies for many infections with which previously we had to temporize. One important disease, bovine mastitis or inflammation of the udder, is now being handled much more satisfactorily than was possible before the introduction of the newer remedies. There is some evidence, however, that



elimination of some of the common infections serves to pave the way for the appearance of others, which are not affected by present drugs and antibiotics. It is possible that we are upsetting some microbial relationships that open the way for kinds of infections which previously were repressed.

New drugs and new surgical procedures are constantly being tested in our clinics. Some of the intravenous and intraspinal anesthetics which have been in routine use in veterinary medicine for a number of years are only now being adopted widely in human surgery. Also, in fracture treatments, the various kinds of pinning operations were first used in veterinary surgery and are now far more widely utilized than in human surgery.

#### EXTENSION SERVICES

Although this College does not have a special extension division, nevertheless, it does a considerable amount of off-campus, noncredit, teaching. It also provides a number of special services for practicing veterinarians and livestock owners. Although disease control within the state is not a function of this College, it collaborates with the Department of Agriculture and Markets, the responsible agency, in helping with many of its problems by supplying laboratory services and expert help. A considerable number of our staff are in demand as speakers at veterinary meetings and meetings of farm groups both within and without the state. Many of the in-state meetings are arranged through the Extension Service of the New York State College of Agriculture. Our principal service activities are rendered through our diagnostic laboratories, of which there are a total of twelve. Three of these are located on the campus at Ithaca, and the others at various strategic points throughout the state. Six of these units serve the poultry industry, five deal with bovine mastitis, and one is a general unit where all other routine diagnostic work is done. All of these units are used to capacity and are very much appreciated. They serve not only to provide accurate, definitive diagnoses in many outbreaks, but they are also valuable in sharpening the clinical acuity of the veterinary practitioners of the state. The second object is also served by the Annual Conference for Veterinarians, a three-day short course which has been arranged each January for more than forty years. At these conferences an attempt is made to bring to practitioners the newer knowledge, techniques, and procedures of their profession. Ordinarily more than one-third of all licensed veterinarians of the state, and more than one-half of all private practitioners, are in attendance.

The livestock industry of New York has available a disease-control service which is second to none in this country, or in any other part of the world, for that matter. The Veterinary College has played, and continues to play, a vital part in this situation.

W. A. HAGAN

Dean of the New York State Veterinary College

## APPENDIX XIV

REPORT OF THE NEW YORK STATE COLLEGE OF  
AGRICULTURE AND OF THE CORNELL UNIVERSITY  
AGRICULTURAL EXPERIMENT STATION*To the President of the University:*

SIR: I have the honor to submit the report of the New York State College of Agriculture and of the Cornell University Agricultural Experiment Station for the fiscal year 1950-51.

The outbreak of war in Korea last year aroused fears of impending shortages and rising prices. The resulting upsurge in consumer buying brought sharp increases in prices of meat animals, cotton, wool, tobacco, and oil crops, as well as in some basic commodities. Although prices increases have reduced somewhat the severity of the price-cost squeeze in which New York farmers were caught during the preceding year, they are still at a marked disadvantage in competing with industry for labor since New York farm prices are in the aggregate 8 per cent below parity.

The Extension Service program has been aimed primarily at the problem of maintaining farm production at full capacity while at the same time emphasizing labor efficiency and the control of costs. The research program of the Experiment Station this past year has been adjusted to meet several emergency problems arising as a result of the current international situation. Despite the military situation, the increasing shortage of farm labor and other factors, the student enrollment remained about the same as last year—an all-time peak for the College.

## RESEARCH

The following brief progress reports will illustrate the nature and scope of the Experiment Station's program. More detailed information is provided in the Annual Reports of the Colleges of Agriculture and Home Economics to the State University of New York, the Governor, and the Legislature.

Cost-account studies with 261 dairymen have shown that while it takes more feed to support a high-producing cow than a low producer, it pays off in the milk pail. The high producers (10,500 or more pounds of milk) may eat up to 4 more tons of feed a year than the low producers (less than 6,500 pounds of milk). In terms of producing 100 pounds of milk, however, the best cows required less feed, and thus over-all costs of production were lower. The high producers made 100 pounds of milk for \$2.56, or 98 cents less than for cows milking 6,500 pounds.

Experiments recently completed have shown that by cutting timothy hay just as the heads are emerging instead of waiting until the late or seed stages, farmers will get 40 per cent more out of their crop. Dairy cows fed early-cut, well-cured timothy hay produced nearly 26 pounds of 4 per cent milk a day and gained almost half a pound a day in body weight. Cows fed hay cut at the seed stage yielded only 16 pounds of milk daily and lost nearly a pound a day even though they received a limited amount of grain. Results obtained with early-and late-cut clover were much the same. When liberal grain feeding was followed, cows produced 20 per cent more milk on early-cut timothy than did cows fed on the late-cut hay.

Dairy cow sterility is one of the most important problems facing the dairy-men of New York State. A specially equipped mobile laboratory, hauled by a jeep truck, is aiding in the solution of this problem. The mobile laboratory, equipped with the apparatus and materials necessary for studying sterility in herds on farms, was donated by the New York State Artificial Breeders' Coop-

erative and the New York State Farm Bureau Federation. On farms selected by the county agents and local veterinarians, the personnel, including technicians from the Colleges of Agriculture and Veterinary Medicine, examine the herds, analyze disease conditions, and adequacy and quality of feed, and study management practices and past records. Herds on near-by farms are studied for comparison. The laboratory staff does not treat animals, but reports are given to the farmers and their veterinarians.

A recent survey on irrigation shows that more and more farmers are resorting to this practice to assure adequate water during dry weather. The number of installations has quadrupled in the past ten years, and many additional farmers plan to install systems in the near future. At the present time, irrigation is used primarily for potatoes, tomatoes, sweet corn, snap beans, cauliflower, and strawberries. Some farmers feel that irrigation of pastures is practicable. The increase in irrigation has raised a number of important problems, and research is now under way to determine when and how much water to apply to the various crops, quantities of fertilizer needed, and the desirable balance between nitrogen, phosphate, and potash.

Particular attention has been given to the irrigation of potatoes, and striking increases in yield have been obtained. Three inches of water applied during dry periods last year to the Canoga, Chenango, Katahdin, and Kennebec varieties gave an average increase of nearly 100 bushels of U.S. No. 1 potatoes per acre. In addition to increasing yield, the irrigation caused the potatoes to set more tubers per hill. Although more defective tubers appeared in the irrigated plots, the increased yield more than compensated for this.

For the past few years, many consumers have been complaining about the poor quality of potatoes in the retail markets. An extensive project, in cooperation with the United States Department of Agriculture, has shed some light on this problem. More than 350 samples of potatoes were followed from shipping points to the retail stores. It was found that external damage more than doubles between these points. Practically all of the deterioration was due to an increase in cuts and bruises. As a result of these findings, growers, shippers, wholesalers, and retailers have been advised to give special attention to preventing damage during harvesting, grading, packing, loading, and unloading, shipping, and display in stores. Reasonable precautions will result in a much better product for the consumer.

There is considerable current interest in the use of antibiotics, including penicillin, terramycin, aureomycin, and bacitracin as supplements to livestock and poultry feeds. Recent data indicate that although antibiotics may be a valuable addition to poultry feeds, they do not make a good ration out of a poor one. The drugs, however, do step up the growth rate of chicks by as much as 10 per cent, and have an even greater effect on turkey poults. The indications are that the antibiotics improve feed efficiency. More research is needed to find out why these drugs are so effective in promoting growth. Also needed is more information on the most efficient level for their use in rations.

Addition of aureomycin to the diet of dairy calves during the first 60 days of age resulted in a consistent increase in the rate of growth and a reduction in the incidence of scours. However, when 100 milligrams or more was fed to calves 4 to 5 months of age and to lambs 6 to 8 months old, they consumed less feed and the rate of growth was reduced in many of them. Examination of the rumen bacteria failed to reveal marked changes in either the numbers or types of microorganisms present.

Two new grain varieties, Erie barley and Genesee wheat, were introduced during the past year. Erie is a two-row spring barley and is resistant to Race 4 of powdery mildew. While not entirely resistant to loose smut, it has shown greater resistance than other widely grown varieties. In tests, Erie has yielded an average of 3 more bushels an acre than Alpha, currently the most popular variety. Genesee, a new winter wheat of soft, white kernel quality, is resistant to shattering, has high resistance to loose smut, and moderate resistance to bunt. In tests, it yielded about 8 per cent more than Cornell 595 and Yorkwin.

These new grain varieties will return to farmers and consumers many times the amount of money it cost to develop them.

Years ago, the production of cucumbers for fresh market and for pickling was a profitable enterprise on many New York farms. Later, serious losses caused by the mosaic disease practically wiped out the industry. During the past two years, two mosaic-resistant cucumbers have been produced and introduced to the state's vegetable growers. One of these, Yorkstate Pickling, met with instant success and was raised throughout the state last year. Niagara, a slicing-type cucumber, is also highly resistant to mosaic. Although not perfect in type, the variety produces a good crop while other varieties are a total loss because of the disease. It is expected that these new mosaic-resistant varieties, along with others subsequently developed, will restore to New York the profitable cucumber industry it formerly enjoyed.

Turkey producers have suffered severe economic losses from an enlarged-hock disorder in turkeys, caused by the lack of an unknown nutrient or nutrients in the diet. After considerable research, it was discovered that fish liver oil, an important source of vitamin A in turkey rations, under certain conditions reduced the level of an essential chemical, creatine, in the muscles. The turkeys became weakened, crippled, emaciated, and were almost a complete loss at market time. After many additional experiments, nutritionists have found that the enlarged-hock disorder can be prevented by rations that supply most of the vitamin A as carotene from corn products and green leafy materials such as alfalfa meal, or as a high-potency Vitamin A oil, plus an unknown required factor present in dried brewers' yeast.

Windbreaks are an important adjunct to the intensive production of vegetables, especially onions, on muck soils in the state. Without effective windbreaks, high winds in the spring frequently destroy many plantings by literally blowing them out of the soil. Willow windbreaks, in present use, deteriorate at an average age of 10 years, largely because of excessive branch and root pruning and disease. Several alternative plants are being tested in commercial muck areas, and the Amur Privet seems to most nearly fit the needs and desires of muckland operators. Although the initial cost of planting is higher, it would appear that, in the long run, privet hedges will cost no more than equivalent willow hedges. The privet hedges are much longer lived, have fewer diseases, and require less growing space than the willows.

#### EXTENSION SERVICE

In general, the agricultural extension program has encouraged full farm production. Although there has been no acute farm labor shortage, high industrial production and a low level of unemployment have pushed up farm labor wage rates. Farmers are working even longer hours than usual and are making full use of labor-saving machinery. Increased output per farm worker and a reasonable attitude toward price support policies keynote objectives in present extension teaching programs.

An Extension Service Defense Council composed of administrative personnel has been meeting bimonthly to review progress in dealing with current problems and to consider outlook and anticipated needs. Special attention has been given to farm labor, especially the utilization of labor, and to helping farmers use out-of-state labor by forming cooperative groups or associations. The Council will consider programs for the care and repair of farm machines; it will give attention to health and safety on the farm and in the home; and will consider the special problems of consumers in the face of possible out-of-line prices or possible shortages of specific foods.

The Council is aware of the problems of morale among the people and within its own staff. It realizes that the ranks of the Extension Service will be somewhat depleted because of mobilization and will recommend necessary changes in programs.

The Council will consider changing the type of bulletins issued by the Extension Service in order to deal effectively with specific defense problems and at the same time to conserve paper and other resources.

In June, 1950, President Alvin C. Eurich of the newly organized State University of New York appointed a Committee on Extension Services. Professor L. D. Kelsey of the College of Agriculture served the committee as a consultant. The decentralized nature of the new University and the variety of activities carried on by the thirty-three units generally referred to as extension courses, evening school, community service, or other similar terms indicated the need for a clarification of the situation.

The committee was instructed to clarify terminology and to make "recommendation for effective coordination of services, improved operation, and future development." Visits have been made to many of the units involved. Data have been gathered and presented to three meetings of the committee. A report of findings was presented to heads of units at the spring meeting of the administrative staff. The committee reported that the employment of a director of extension by the State University at this time is not recommended.

The portion of the report of most concern to the director of extension deals with coordination between the Extension Service and the two-year institutes that teach agriculture and homemaking. The report recognizes the primary responsibility of the State Colleges in the extension field, and states that the directors of the institutes do not feel that they should employ full-time extension specialists. Specific methods of fuller cooperation are listed.

The adult education program of the State Department of Education is referred to and its relation to other services. The committee recommends occasional conferences of the two state staffs—Adult Education and Cooperative Extension Service. Several such conferences have already been held with good results.

Active participating membership showed some changes in 1949. In the farm department there was a small decrease to 88,615. Home bureau membership increased about 10,000 to 105,000. Four-H club membership increased by about 2,000 to a total enrollment of 51,631. These figures are all in line with a slow gradual up-trend. Local governments continued liberal financial support. Appropriations by boards of supervisors during 1950 were as follows: farm departments, \$512,625; home departments, \$468,124; 4-H club departments, \$475,396.

Fifty-seven students in the College of Agriculture are registered as interested in preparing for Extension Service. These men have been given individual conferences at least twice during the year regarding the best curriculum for them to pursue while in college. This is all undergraduate work. Those persons interested in extension education at the graduate level are advised by the School of Education, in which more than twenty persons are working at present toward advanced degrees in extension.

Eighty-two extension workers attended the Northeastern Regional Extension Service Summer School in July, 1950. Forty-six came from the northeast and 19 from states outside the region. Eighteen foreign visitors attended the first open-house seminar held at the school. These represented 13 countries. By far the largest number of students were county workers, 61 in all. The Horace Moses scholarships helped to bring in 4-H club workers. Besides the six courses of study offered, the optional activities and informal association among the workers seem to be valued highly by those who attend. A few use this school to help them decide about full-time study for advanced degrees.

The amount of special subject-matter training given to agricultural agents annually by specialists has been increasing in recent years, and has now reached an amount, in terms of time away from the counties, that requires careful reappraisal. On the other hand, the amount and quality of information and advice given to farmers by able staffs of commercial and farmers' cooperative organizations require continuous careful study by agents to enable them to keep abreast with all the new insecticides, fungicides, herbicides, fertilizers, seeds, and other materials on the market. It is not an easy problem to solve.

Extension specialists in New York have had unusually favorable opportunities to keep up with developments in their several subject-matter fields. Less formal



attention has been paid to improvement in teaching methods. Last April, a two-week workshop for specialists was organized and conducted by a committee of extension specialists chosen by the Cornell Extension Club, which sponsored the study. Two administrative specialists assisted. Success of the event was beyond expectations. Voluntary enrollment brought about half of the specialist staff. One or two of the state agent leaders and one or two county agents were invited to participate in some of the sessions as consultants.

The Cornell Extension Club (extension specialists), in regular monthly sessions, has provided for follow-up discussions on the report and findings of the workshop. Furthermore, two or three unorganized groups of specialists in the Colleges of Agriculture and Home Economics have met informally to discuss problems raised during the workshop.

Cornell has been glad to assist in the Economic Cooperation Administration, Point IV, and Supreme Command Allied Powers programs. The exchange of scientific information and the promotion of acquaintance and better mutual understanding among teachers are costly but worthwhile. Some of the personnel selections could be improved, but on the whole, our time and efforts have been given gladly to the visitors from universities and experiment stations abroad.

The reciprocal exchange of scientific personnel is highly desirable but more difficult to manage. Persons most desired for foreign service are mainly those the colleges can least afford to spare. One solution is the selection of well-trained, promising young men to serve as assistants to scientists who have retired after a distinguished career.

#### APPROPRIATIONS

The state appropriations for the fiscal year 1949-50 did not include the emergency compensation for personal service which was paid from a separate item. On April 1, 1950, however, the emergency compensation was incorporated into the base salaries. The 1950-51 appropriation for personal service was \$2,183 less than the 1949-50 appropriation plus emergency compensation. Because certain salary increments were allowed, the College was required to make a personal service saving of approximately \$100,000. The appropriations for maintenance and operation were increased \$17,500. The appropriations for equipment were decreased \$70,000.

The Legislature provided an additional sum of \$15,000 for research on dairy cow sterility. The sum of \$83,000 was also appropriated for new refrigeration equipment in the Department of Dairy Industry.

The federal appropriations for teaching, research, and extension work were the same in amount as those for the year 1949-50. In addition to this, the sum of \$50,150 was assigned to the Cornell Station for one year under Section 9b3 of the Research and Marketing Act of 1946.

#### COUNCIL FOR THE NEW YORK STATE COLLEGE OF AGRICULTURE AND THE AGRICULTURAL EXPERIMENT STATION

Upon the nomination of the New York State Conference Board of Farm Organizations, the Board of Trustees elected the following persons for a three-year term beginning July 1, 1951: John V. B. Rice to replace Donald Kuney and J. D. Amelee to replace Clayton G. White.

Upon the nomination of the President and Dean of the College of Agriculture, T. E. LaMont was elected by the Board of Trustees to succeed Frank W. Benaway for a three-year term beginning July 1, 1951.

The Faculty of the College of Agriculture elected H. M. Munger to succeed O. C. French and S. S. Atwood to succeed himself.

#### THE COLLEGE STAFF

The Faculty lost four valued members by death during the year. They are reported with regret, as follows: Joshua Alban Cope, professor of forestry, on August 26; Philip Henry Wessels, emeritus professor of vegetable crops, on

November 30; Earle Volcart Hardenburg, professor of vegetable crops, on December 4; and Forest Milo Blodgett, professor of plant pathology, on June 11.

The following retirements took place during the year: Donald Reddick, professor of plant pathology, on December 31; Leland Eugene Weaver, associate professor of poultry husbandry, on March 31; and Thomas Livingston Bayne, associate professor of rural education; John Alfred Lennox, professor in extension service and assistant state 4-H Club leader; Clifford Nicks Stark, professor of bacteriology; Homer Columbus Thompson, professor of vegetable crops; Ralph Hicks Wheeler, professor in extension service, director of finance, and assistant treasurer of the University; and Paul Work, professor of vegetable crops, on June 30.

Resignations during the year included: Mrs. Betty Burch Doak, assistant professor of extension teaching and information, on August 31; Lloyd Eugene Slater, assistant professor of marketing, on August 31; Aubrey Alfred Foster, associate professor of plant pathology, on September 30; Robert Crowthers Clark, Jr., associate professor of rural sociology, on October 31; Thomas Matthew Eastwood, assistant professor of floriculture, on March 31; Benjamin Ferris Lownsbury, Jr., assistant professor of plant pathology, on April 30; Mrs. Frances Adkins Hall, acting assistant professor of rural sociology; Donald Joseph Pierce, acting assistant professor of ornamental horticulture; and George Frederick Somers, Jr., associate professor of biochemistry, on June 30.

The following new appointments have been made to take effect during the year or on July 1, 1951: Frederick Campion Steward, professor of botany; Glenn Almer Bakkum, acting professor of rural sociology (10/1/50 to 1/31/51); Cameron George Garman, acting professor of marketing (11/16/50 to 2/28/51); Stephen Angus Hutchinson, acting professor of plant pathology (9/1/50 to 5/31/51); Harry C. Ramsower, acting professor of extension education (2/19/51 to 6/9/51); Edward Owen Moe, associate professor of rural sociology; Donald Alden Wilber, acting associate professor of entomology (9/15/50 to 1/31/51); Harry R. Ainslie, assistant professor of animal husbandry; Howard Guion Andrus, assistant professor of rural education and director of the educational placement bureau; Mary Blanche Armstrong, assistant professor of rural sociology; Donald Wesley Bates, assistant professor of agricultural engineering (10/1/50 to 6/15/51); Theodore Elwin Eckert, assistant professor of rural education; William Adolph Feder, assistant professor of plant pathology; Robert Hutchinson Foote, assistant professor of animal husbandry; William Lee Garman, assistant professor of agronomy; Lawrence Stanley Hamilton, assistant professor of forestry; William Rudolph Kunsela, assistant professor of rural education; John Leo McGurk, acting assistant professor of marketing; Ben Edward Sheffy, assistant professor of animal husbandry; Samuel Thomas Slack, assistant professor of animal husbandry; James Wendell Spencer, assistant professor of agricultural engineering; and James R. White, assistant professor of rural sociology.

Promotions in the Faculty, to become effective July 1, 1951, include fourteen from the rank of associate professor to professor, and nine from assistant professor to associate professor.

Following the retirement of Professor Wheeler, Arthur Howard Peterson was promoted to director of finance for the State Colleges, assistant treasurer of the University, and professor in business administration, effective July 1, 1951. Also on that date Henry Martin Munger, professor of plant breeding and vegetable crops, will assume the headship of the Department of Vegetable Crops, filling the vacancy caused by the retirement of Professor Thompson.

On July 1, 1951, Herrell Franklin DeGraff, professor of land economics, becomes the Babcock Memorial Professor of Food Economics, in the School of Nutrition. He will continue to hold membership in the Faculty of Agriculture and in the Department of Agricultural Economics.

## THE STUDENT ENROLLMENT

The over-all registration of students taking work in the College remained about the same as last year. The minor changes in the numbers in the various classifications is insignificant. The fact that the enrollment remained at its peak, despite the influence of the military situation, the increasing shortage of farm help, and the opportunities for employment in industry is remarkable.

The number of students formally enrolled for instruction in the College during 1950-51 is reported in the following table, with the numbers for 1949-50 for comparison:

	1949-50	1950-51
Four-year students:		
Freshmen .....	362	370
Sophomores .....	331	357
Juniors .....	306	350
Seniors .....	485	385
Total .....	1484	1462
Special students .....	69	86
Two-year students:		
Dairy farming .....	56	54
General Farming .....	86	81
General livestock farming .....	13	16
Fruit growing .....	16	11
Poultry farming .....	14	12
Vegetable growing .....	18	13
Commercial floriculture .....	18	9
Nursery landscape service .....	2	3
Total .....	223	199
Graduate students .....	760	788
Summer session students .....	799	792
Taking regular courses in the College but registered as extramural .....	96	80
Total .....	3431	3407
Less number counted twice .....	202	157
	3229	3250

WILLIAM I. MYERS  
Dean of the New York State College of Agriculture

## APPENDIX XV

REPORT OF THE DIRECTOR OF THE NEW YORK STATE  
AGRICULTURAL EXPERIMENT STATION AT GENEVA

*To the President of the University:*

SIR: We have the honor to submit the report of the New York State Agricultural Experiment Station for the fiscal year ended June 30, 1951.

In the highly diverse agriculture of New York State, which is carried on under a wide variety of soil and climatic conditions, there are always more problems that need the attention of research workers than can be cared for adequately at any one time. By mutual agreement with the Cornell University Experiment Station at Ithaca, the Experiment Station at Geneva concentrates its research activity primarily on the problems of production and utilization of fruits and vegetables for processing. The research work consists of a well-balanced and flexible program that takes into consideration the immediately pressing problems brought to our attention by committees of growers and processors, without, however, sacrificing the essential features of long-time fundamental projects that aim primarily at increasing our basic knowledge of biological and biochemical processes related to the agricultural and food industries of the state.

As presently organized at the Station, the research work is carried on in the Divisions of Seed Investigation, Pomology, Vegetable Crops, Entomology, Plant Pathology, and Food Science and Technology, which includes Chemistry and Bacteriology. Many of the research problems involve the special technics and training found in the personnel of two or more divisions, and cooperative projects and team work among the group is the rule rather than the exception.

At the present time, there are 201 formal research projects, which cover a wide range of specific problems in our field. Each year a number of projects are finished, but many of the fundamental problems require years of continued research that cannot be concluded prematurely without serious loss of time and momentum. All projects are carefully scrutinized, revised, and brought up to date at the beginning of each fiscal year. The research program is being shifted continuously, and reallocation of staff and facilities is made from time to time to meet new conditions as far as possible. Complete lists of current research projects and of technical and popular publications are found in the Annual Report of the New York State Agricultural Experiment Station required by law. A few examples of recent research contributions are given below.

## EXAMPLES OF RECENT RESEARCH CONTRIBUTIONS

An effective chemical treatment for the control of seed corn maggot and the control of seed rotting organisms associated with the injury from this pest was recently developed and introduced by the entomologists and plant pathologists at this Station. The treatment consists of coating the seed with a mixture of insecticide and fungicide materials applied as a slurry to the seed before planting and results in a much better stand of large seeded crops such as lima beans, snap beans, corn, and squash. The slurry prevents the destruction of the seed or serious injury to the young seedling by corn maggot and rot, which are especially severe when the weather and soil conditions during germination are unfavorable.

The control of insect pests of cabbage, beans, peas, and carrots should be greatly facilitated by an inexpensive, tractor-mounted sprayer which applies concentrated insecticide mixtures at rates ranging from 10 to 20 gallons per acre instead of the usual 100 to 150 gallons required by standard dilute spray

applications. This equipment, developed by the Station, is a modification of the machine used for the application of chemicals for weed control. A high-clearance sprayer involving the concentrate principle has been successfully used to treat sweet corn for the control of the corn ear worm. Materials for concentrated spray mixtures must be used in the form of an emulsion. Unfortunately, this prevents the use of practically all fungicides currently available, so that low-gallonage methods can be recommended only for the control of insects but not for diseases of vegetables.

The advantages and disadvantages of several recently developed organic fungicides have been tested for the control of diseases affecting currants, using the varieties Red Lake and Wilder. Bordeaux mixture, which has long been the standard fungicide for preventing leaf spot and anthracnose of currants is, unfortunately, not effective in controlling fruit rot caused by *Botrytis*. Furthermore, continued use of Bordeaux spray over a period of years results in an appreciable decrease in the size of berries and in a reduced total yield. Among the materials tested, it has been found that Fermate, 2-100, and Zerlate, 2-100, effectively controlled all important diseases found on currants in New York State without causing injurious after-effects on plant behavior.

Progress has been made in the breeding of tomato strains resistant to leaf blight, blossom end rot, anthracnose, and verticillium wilt. Selections indicate that the progeny of resistant plants isolated several years ago have a sufficiently high tolerance to diseases to be used as parents in crosses with more highly developed horticultural varieties. As yet, no commercial variety adapted to New York State conditions shows a satisfactorily high degree of tolerance or resistance to all of the diseases attacking tomatoes, although tests indicate considerable variation in this respect among the different sorts.

During the past year, three new strawberry seedlings were named and sent out for more extensive trial—the Essex, the Empire, and the Erie. The Essex produces an extra early, good-quality, attractive red, medium-sized berry, especially adapted for home use. The Empire and Erie varieties have possibilities of being used as commercial sorts, since they are very productive and bear large, attractive, firm berries. The flesh of the Erie is red, and it should prove as good a freezing sort as one of its parents, the Howard; the Empire has light-colored flesh, not desirable for freezing.

A new autumn-bearing variety of raspberry which ripens its fruit two to four weeks earlier than the fall crop of Indian Summer has been named September. The berries are medium-sized, firm, and bright red. The new variety is definitely recommended for home growers and is thought to be worthy of trial for commercial purposes. Two new varieties of blackberries—Hedrick, named in honor of Dr. U. P. Hedrick, formerly Horticulturist and Director of the Station, and Bailey, named in honor of Dr. L. H. Bailey, formerly Horticulturist and Dean of the College of Agriculture at Ithaca—have been introduced to replace the old standard variety Eldorado which produces poor fruits in many plantings. The bushes of both of the new varieties are very vigorous and productive, and the berries are moderately firm, of good quality, and larger than those of the old Eldorado. The Bailey blackberry ripens about a week later than the Hedrick.

Analysis of juice from Concord and Fredonia grapes during a four-year period indicated there was no consistent difference related to a wide range of pruning severities in the amount of soluble solids, pH, viscosity, or methyl anthranilate. Where pruning was exceptionally light, however, there was some reduction in the content of soluble solids. In the heavy crop year of 1950, there was also some relationship between the amount of blue color in the juice and the increasing severity of pruning. The analyses demonstrate that there is no danger of loss in quality of grape juice by following recommended pruning practices that usually result in increased yields, but there is the possibility of seriously reducing the Concord grape juice quality due to over-bearing caused by too light pruning.



Considerable work has been done on the fundamental aspects of the mineral nutrition of fruit plants. It has been demonstrated that nitrogen fertilizer applied alone produced significant changes in the mineral composition of leaves. The phosphorus in the leaf tissue is reduced to 77 per cent of its original value, and potash to 92 per cent by an increase of approximately 50 per cent in leaf nitrogen. Calcium and magnesium are increased 22 per cent and 35 per cent respectively, and dry weight of leaf by 19 per cent. Potash fertilizer, on the other hand, influences only the magnesium content of the leaf. The total amount of phosphorus and potash absorbed from the soil by the fruit plant is greater when increased amounts of nitrogen fertilizer are applied. Part of these elements apparently are deposited in the woody rather than in the green tissue. Blueberries receiving ammonium nitrate made 50 per cent more growth than those receiving this element in the form of sodium nitrate. The influence of ammonium ion in improving the appearance and the growth of a plant was more marked the second season than it was the first. Plants receiving ammonium nitrate did not show iron deficiency symptoms even in a soil of pH 6.0.

In studies of the factors affecting the market quality and yield of peas grown for processing, it was found that the application as a soil amendment of 1,000 pounds of gypsum per acre increased the yield of peas and held them in "fancy" grade over a longer period of time. The improvement in quality may be due to partial control of root rot organisms. Applying 300 pounds per acre of nitrate of soda at the time the peas came into bloom also increased the yield slightly by maintaining the peas in the fancy grade over a longer growing period.

Sowing cabbage seed directly in the field in which the cabbage was grown to maturity produced significantly larger yields than the usual method of sowing the seed in a plant bed and subsequently transplanting to the field. The increased yield from direct seeding is offset somewhat by complicating factors of insect injury and competition from weeds. A new method for the control of cabbage maggot, and more effective means of weed control in direct-seeded cabbage fields must still be found.

A breeding program was initiated several years ago to develop an early-maturing, high-yielding, paste-type tomato suitable for the manufacture of tomato paste or purée and adapted to New York growing conditions. A strain of tomato which is as early fruiting as John Baer and which will yield approximately the same tonnage per acre should be ready for release to seedsmen in 1952. An outstanding selection of beans, developed especially for canning, with a round, white-seeded pod of deep green color and resistant to disease, has now advanced to the seed increase stage, and sufficient seed should be available for extensive trials in 1952.

Progress in developing objective tests for measurement of quality of processed foods was made in a study of the relation between raw tomato grades and the tomato products. A good method for measuring the color of the fresh tomato and the color of the canned tomato juice manufactured from the raw product was developed. In the 1950 season, it was found that 80 per cent of the raw tomatoes used for processing had to possess a red color equivalent to U.S. No. 1 Grade in order to produce a juice of U.S. Grade A color. These experiments involved the cooperation of the Federal and State Processed Products Inspectors and the personnel of several divisions at the Station.

In the pilot plant, a study has been undertaken on the yield and quality of frozen apple slices prepared by different methods of processing. The incidence of seed cells in the slices has been investigated, using different sizes of coring knives and seed cellars. Factors affecting the rate of heat penetration into the solutions during the blanching process have been studied. Unsatisfactory blanching occurs at temperatures below 170° F. The maximum temperature was found to be around 208° F. The time of blanching can be reduced by half if the hot water is agitated.

Basic biochemical investigations have been undertaken on the isolation and identification of the volatile constituents present in Concord grape juice. The general procedure for such constituents has been reduced to a systematic method, and the following compounds have been found to be present in the prepared juice—acetic acid, ethanol, isopropanol, methanol, acetaldehyde, acetone, and methyl anthranilate. Studies of this nature contribute to a better understanding and control of the problems of quality determination of processed foods.

#### OTHER SERVICES

Besides conducting experiments for the promotion of agricultural science, the Station also performs analyses and other scientific work requested by the Commissioner of Agriculture and Markets in connection with the administration of the provisions of laws under his jurisdiction. This involves chiefly the chemical and microscopic analysis of official samples of feeds, fertilizers, and insecticides collected by inspectors and testing the germination and determining the purity and quality of seeds offered for sale in New York State. Standardization of glassware used in the dairy and food processing industry is also done by the Station. These services, of great value to the agriculture of the state, are carried out under our regular budget.

The staff of the Experiment Station also participates in the organized Extension Service of the College of Agriculture insofar as this can be done without serious interference with the research work. In addition, a large number of growers and processors bring their problems directly to the Station through personal visits or through correspondence. There is some incidental participation in the undergraduate instruction of the College of Agriculture, and twelve graduate students registered at Cornell are employed as assistants on our staff and do their thesis work under the supervision of our professional personnel.

#### APPROPRIATIONS

State appropriations for the Experiment Station for the fiscal year ended March 31, 1951, amounted to \$839,381. The sum of \$430,000 was reappropriated for the construction of a central heating plant, and since the low bids for the contract totaled \$738,968, an additional allocation of \$308,968 was required. For the year beginning April 1, 1951, an appropriation of \$848,897 was made for personal service and maintenance and operation, including an allotment from the capital construction fund of \$28,000 for equipment. An appropriation of \$350,000 was made for the construction of steam tunnels and service connections for the heating plant. The allotment of federal funds for 1951-52 includes \$1,500 Adams, \$1,500 Hatch, \$6,000 Purnell, \$10,751.17 Bankhead-Jones, \$9,943.23 for Research and Marketing 9b1 and 9b2, and \$9,000 for Research and Marketing Title II. The number of industrial grants in force during the year was eighteen, and the amount of money involved was \$21,450.

#### PHYSICAL PLANT

One of the most pressing needs at the Station is a building for food science and technology. Food processing is one of the prominent features of the research program that was given increased emphasis after the work of our dairy division was moved to Ithaca about eight years ago. At that time, we started pilot-plant work on a small scale in anticipation of promised support for expanded research in this field. At present the facilities for such work are woefully inadequate. Complicated and expensive equipment is now crowded into two small basement rooms, and the laboratory buildings are outmoded and hazardous for many types of chemical work. Growers and processors have repeatedly urged the need for improved facilities so that we could speed up our research program in food processing.

The food science building was given top priority among our needs at the time the postwar construction program for the Station was first contemplated in 1942. The plans for such a building were completed six years ago, and an

initial appropriation was made in 1946 to start construction. The money, however, was used for other projects, and the appropriation act was repealed in 1951.

The new central heating plant, which was gotten under way primarily to provide steam heat for the food science building, is practically complete. It could be ready for operation within a few weeks except that as yet there are no steam lines to the existing buildings and permanent services for water, electricity, and sewers are not installed. Appropriations for this supplementary work are available, and it is expected that the contract will soon be let.

The operation of the new heating plant will involve additional personnel and perhaps additional costs for fuel since the capacity of the boilers is considerably in excess of the needs for existing buildings. The efficiency and economy of central heating cannot be realized until the additional buildings are provided as originally contemplated. Plans and specifications for both a new food science and technology building with attached pilot plant, and for an entomology and plant pathology building with special greenhouses, are complete and ready to be carried out as soon as money becomes available. A request for an appropriation of \$1,754,200 for the food science and technology building has been approved by the Cornell University Trustees and submitted to the State University Trustees in the 1952-53 budget. Without this building with its pilot plant facility the research in food utilization at the Station remains severely handicapped, and its scope must necessarily be limited to conform to our cramped quarters.

#### STAFF

At the present time, the staff comprises about seventy-five professional scientists and approximately ninety-seven nontechnical workers, including clerical and maintenance personnel. During the summer season, when field activity is at a peak, from seventy-five to one hundred additional people are employed on temporary service.

It is with profound regret that we report the death on October 24, 1950, of Arthur W. Clark, Emeritus Professor, Chemistry.

Effective July 1, 1950, the following were promoted from assistant professors to associate professors: Frank P. Boyle and Robert W. Holley, Division of Food Science and Technology; Morrell T. Vittum, Division of Vegetable Crops; Alvin J. Braun, Division of Plant Pathology; and Edward H. Smith, Division of Entomology. On January 1, 1951, Professor James M. Hamilton was made head of the Division of Plant Pathology to succeed Professor Reinking, retired, and on February 1, 1951, Dr. Wilbur T. Schroeder was promoted from associate professor to professor in the Division of Plant Pathology.

Appointments made during the year beginning July 1, 1950, included Robert M. Gilmer, John J. Natti, and Michael Szkolnik, assistant professors of Plant Pathology, and Knud G. Swenson, assistant professor of Entomology, Robert L. LaBelle and Theodore Wishnetsky, Research Associates in the Division of Food Science and Technology, and John P. Watson and Keith H. Kimball, Research Associates in the Division of Pomology. The only resignation during the year was that of Arnold M. Mattson, Chemical Microscopist in the Division of Food Science and Technology, on April 24, 1951.

Leaves of absence were granted during the year to James D. Luckett, Editor, August 15 to October 31, 1951; George W. Pearce, Associate Professor in the Division of Food Science and Technology, September 1, 1950, to August 31, 1951; Willard F. Crosier, Associate Professor in Seed Investigations, December 1, 1950, to March 31, 1951; Carl S. Pederson, Professor in Food Science and Technology, June 1, 1951 to May 31, 1952.

It is a pleasure to record again our appreciation for the fine spirit of cooperation and the whole-hearted devotion shown by the staff as a whole. The reputation of the Station as a dependable source of information in our field and the confidence shown by the public in our research is obviously due primarily to the skilled ingenuity, the initiative, and the sustained enthusiasm for research of the many conscientious individuals who make up our group. We are grateful

also to the many practical and professional groups and to those in administrative positions who give counsel and guidance in our efforts and determine the general policies under which we carry on our work.

WILLIAM I. MYERS

Dean of the New York State College of Agriculture

ARTHUR J. HEINICKE

Director of the New York State Agricultural Experiment Station

## APPENDIX XVI

### REPORT OF THE DEAN OF THE NEW YORK STATE COLLEGE OF HOME ECONOMICS

*To the President of the University:*

SIR: I have the honor to submit the report of the New York State College of Home Economics for the year 1950-51.

The second year of operation as a unit of the State University has advanced in the direction outlined in the report for the year 1949-50. Cooperation with other units in the State University has continued. All four of the state colleges at Cornell University have loaned personnel to the State University in order to outline and implement programs of benefit to the total State University and to the interrelation between the State University and other educational institutions in the State. During the fall semester, the Dean of the College of Home Economics was granted a leave of absence by Cornell University to work full-time for the State University in the coordination and development of home economics within the State University and between the State University and the nine other institutions offering the Bachelors' or advanced degrees in home economics in the State. Although there has always been substantial coordination of work in home economics in the State of New York—due in large part to the work of the State Department of Education at Albany—plans were laid for closer coordination between the B.S., M.S., and Ph.D. programs in our College and the three B.S. programs and six two-year programs in home economics in the State University. Plans were also made and gotten under way for advanced training of selected personnel from the 11 teachers' colleges in the State University—such personnel to be chosen from the areas of child development, social science, and student personnel administration and the training to be offered at Cornell University. Thus the School of Education and the College of Home Economics, which have always worked in cooperation with other state-supported educational units, now join with the Social Science Research Center, the Office of the Deans of Men and Women, and other allied departments of Cornell University to be of service to the State University in a consulting as well as an advanced teaching capacity.

In order to make it possible for the Dean to undertake the additional responsibility with the State University and to permit continued follow-up, Miss Jean Failing, in addition to her duties as head of the counseling service for the College, assumed further responsibilities as the Coordinator of Resident Instruction. This completed the administrative reorganization of the College, begun in 1947 with the elimination of an assistant deanship and the creation of Coordinators of Research and of Extension. During the fall semester, Miss Catherine Personius, Coordinator of Research for the College, served as Acting Dean.

The first full year of occupation of Statler Hall by the School of Hotel Ad-

ministration has been most rewarding, not only to the school in its teaching program but also to the campus in the successful operation of the Faculty Club. The club activities have been set up in such a way as to provide an easy and gracious atmosphere not only for relaxation but also for the exchange of ideas among personnel of different departments and colleges, so important to the blending of viewpoints and subject matters in a great university. I would like here to pay a special tribute to the staff of the School of Hotel Administration for their part in creating an atmosphere which has done much to contribute to the academic as well as to the social life of the campus.

During the year the College has given increasing amounts of staff time—as have many of the Cornell units—to students and visitors from other countries. There have been in the College 26 regularly enrolled foreign students from nine countries. Because of the special nature of academic backgrounds and because of the vocational needs of these students much more individual planning and attention are required than for students from this country. In addition to regularly enrolled students, there have been many visitors from other countries who have stayed only a day or so, as well as 41 visitors from 14 different countries who have been here for special training on a non-credit basis. A few of these came in groups of three to six, but most of them came as individuals. They have stayed from two weeks to three months. All have required individual programs and uncounted hours of time. The staff has absorbed this load gladly, since it is hoped that such work will prove to be a contribution to international understanding and to the development of sound home and family life education programs in other countries.

#### *Faculty*

The status of the College of Home Economics faculty (exclusive of Hotel Administration) on October 1, 1950 was as follows:

#### INSTRUCTIONAL, RESEARCH, AND EXTENSION\*

<u>Rank</u>	<u>Men</u>	<u>Women</u>	<u>Total</u>
Professors . . . . .	5	20	25
Associate Professors . . . . .	2	39	41
Assistant Professors . . . . .	1	25	26
Instructors . . . . .	2	18	20
Graduate Assistants . . . . .	..	47	47
Totals . . . . .	10	149	159

\* Almost without exception, these people do two of the three types of work. Total proportion of time is about 45 per cent resident teaching, 45 per cent extension, and 10 per cent research.

The School of Hotel Administration Faculty on October 1, 1950, was as follows:

<u>Rank</u>	<u>Men</u>	<u>Women</u>	<u>Total</u>
Professors . . . . .	2	..	2
Associate Professors . . . . .	4	1	5
Assistant Professors . . . . .	4	1	5
Instructors . . . . .	3	2	5
Lecturers . . . . .	5	4	9
Graduate Assistants . . . . .	0	0	0
Totals . . . . .	18	8	26

Only about half of the credit hours for the Bachelor's degree in the College, exclusive of hotel administration, are taken in the College; in order to ensure a liberal education, nearly half of the credit hours are taken in other colleges



of Cornell University. The college faculty, then, is supplemented by the faculties of other colleges in Cornell University.

The number of hours of instruction taken in other colleges in 1950-51 by home economics students (exclusive of hotel administration) was as follows:

<i>College</i>	<i>Number of Hours</i>	<i>Full-time Student Equivalent*</i>
Endowed Colleges . . . . .	5,826	182
Agriculture . . . . .	2,607	81
Hotel . . . . .	378	12
Industrial and Labor Relations . . . . .	228	7
Total of Other College Instruction . . . . .	9,039	282

\* Based upon 32 credit hours per student.

The College, exclusive of the School of Hotel Administration, in turn offered instruction for other colleges in Cornell University.

The number of hours of instruction given by home economics to students in other colleges, 1950-51, was as follows:

<i>College</i>	<i>Number of Hours</i>	<i>Full-time Student Equivalent</i>
Endowed Colleges . . . . .	396	12
Agriculture . . . . .	205	6
Hotel Administration . . . . .	465	15
Industrial and Labor Relations . . . . .	29	1
Total . . . . .	1,095	34

All departments of the College report increasing demands upon the staff for participation in state and national institutes and workshops and for speaking and presentation of papers at meetings of state, regional, and national associations. The Mid-Century White House Conference on Children and Youth, the Economic Outlook Conference in Washington, D.C., the American Vocational Education Association, the Association of Women Broadcasters, the Conference of College Teachers of Textiles and Clothing of the Eastern Region are samples of groups in which the faculty participated. One measure of the breadth of participation is revealed by study of the program for the June 1951 meeting of the American Home Economics Association in Cleveland which lists 16 members of the College faculty representing 6 subject-matter areas.

During the year, teaching, research, and extension staff published 31 articles in scientific journals, 44 articles in popular and semi-popular publications, 32 new or revised bulletins, 9 leaflets. Two departments issued bi-monthly newsletters. Two staff members contributed chapters on a phase of their specialized field for inclusion in books by outside authors. Additional figures on press and radio work are given in the extension section of this report.

#### *Library*

A long-standing and urgent need for space for the library will be met next year as we move into the new agriculture—home-economics library building. In order to prepare for this move as well as to provide staff for the new library, three new clerks were granted in the 1951-52 state budget and appointments were made on April 1, 1951. Three more positions and a fund for purchase of books and periodicals are being asked for in the state request budget for 1952-53.

During the year 1,328 volumes were added to the home economics library as follows: 930 books, 366 bound periodicals, 22 theses, and 10 special studies.

## PRESIDENT'S REPORT

The book stock now includes 20,204 volumes. For the most part, the collection is an open-shelf collection which is accessible to both undergraduate and graduate students with the resulting figures on circulation for 1950-51:

Library use.....	70,483
Outside use.....	21,830
Total use.....	92,313

*Physical Plant*

The Martha Van Rensselaer building, the war surplus annex building, and the two prefabricated experimental houses were used to full capacity during the year. The removal of the School of Hotel Administration from Martha Van Rensselaer Hall to Statler Hall greatly expanded space for the work of the School of Hotel Administration and released 2,338 square feet of space for use for the rest of the college program. Careful planning by the staff and allocation by the State of money to rebuild this area to accommodate the most pressing present needs have resulted in maximum efficiency in use of this space.

The mailing and multilithing rooms were moved from the fourth floor to the basement level, thus saving countless man-hours in the transportation of paper and finished materials in and out of the building. The three-year old and rapidly expanding research work of the Department of Child Development and Family Relationships was given space near the rest of the work of the department. Badly needed office and teaching space was made available to the Department of Institution Management. Important adjustments of space were made in other parts of the building to better accommodate the recent and rapidly expanding housing and design research and teaching and the new research in textiles and clothing. Office and teaching space were adjusted for the Departments of Food and Nutrition and of Economics of the Household and Household Management.

The building not only accommodated resident teaching, research, and extension programs both for the regular and non-credit full-time and short-course work, but also took the impact of around a half million persons who used it for a feeding and activity center, of the thousands who came for Farm and Home Week, and of the several thousands who used it for a conference and community center. Maintenance of the building in the face of such use is a problem which challenges the best efforts of the building staff. That the building presents the appearance it does is due to their ingenuity and devotion.

## RESIDENT TEACHING

Re-examination and reorganization of courses and curricula are constant processes in the College. This year, through regular meetings and through the work of standing committees, the faculty studied entrance and graduate requirements and continued the study of the homemaking core courses and of the recommended curricula for students preparing to teach in elementary and secondary schools and in the extension service. One study was made of the entrance requirements with special attention given to the effectiveness of high school grades, of class rank, and of the scores of the scholastic aptitude test of the College Entrance Examination Board in predicting academic success in the College. Another study of required hours of science needed for graduation led to a revision of the social science requirement for the B.S. degree in order to give greater breadth. In the future, in addition to courses in psychology, sociology, history and economics, certain courses in philosophy, in agricultural economics, and in industrial and labor relations will count in fulfilling the social science requirement.

The graduate program has continued to expand and to be strengthened by the development of additional courses designed for graduate students only. Continued development of research capable of carrying advanced graduate

students is outlined under the research section of this report. Graduate students in the regular winter session now number 100, which is the ceiling possible for best work with present plant and faculty. Quality of graduate students is constantly improving, and the number of Ph.D. degree candidates is growing rapidly.

The summer session continues to accommodate many of the winter session graduates who are pushing toward the completion of degrees and also a substantial number of post-Bachelor-degree students who take advantage of the rich variety of summer courses offered. Some of this latter group of students are fulfilling the state requirement of 30 hours of post-Bachelor-degree work needed to obtain permanent certificates for high school teaching. Most of them, however, are personnel from institutions of higher learning, who are "brushing up" on up-to-date content or are attempting to complete advanced degree requirements in such times as they can work out in summer sessions and winter leaves of absence.

The summer months are devoted not only to the work of the regular six weeks of summer session for credit classes, but are also busy from June commencement to September opening of the winter session with both credit and non-credit workshops and short courses.

Enrollment for winter session (exclusive of Hotel Administration) was as follows:

	<i>Full-time</i>			<i>Part-time</i>		
	<i>Men</i>	<i>Women</i>	<i>Total</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>
Undergraduates						
Freshman 1st year . . . . .		151	151			
Sophomore 2nd year . . . . .		175	175			
Junior 3rd year . . . . .		152	152			
Senior 4th year . . . . .		138	138			
Unclassified . . . . .		15	15	5	8	13
Total undergraduates . . . . .		631	631	5	8	13
Graduate . . . . .	10	90	100		5	5
Total . . . . .	10	721	731	5	13	18

Enrollment for summer session (exclusive of Hotel Administration) was 298.

Enrollment in the School of Hotel Administration for winter session was as follows:

	<i>Men</i>	<i>Women</i>	<i>Total</i>
Undergraduates			
Freshman 1st year . . . . .	79	8	87
Sophomore 2nd year . . . . .	68	4	72
Junior 3rd year . . . . .	92	3	95
Senior 4th year . . . . .	104	8	112
* Unclassified . . . . .	2		2
Total . . . . .	345	23	368
Graduate . . . . .	1		1
Total . . . . .	346	23	369

\* Sent by the Navy for study in the School of Hotel Administration.

Enrollment in the School of Hotel Administration for summer session was 294.

Number of students graduated July 1, 1950-June 30, 1951 is as follows:

<i>Degree</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>
Bachelor of Science			
College of Home Economics exclusive of Hotel Administration		137	137
Hotel Administration	103	6	109
Master of Art	3	3	6
Master of Science	2	43	45
Master of Science in Education		6	6
Master of Education		1	1
Doctor of Philosophy		5	5

#### RESEARCH

During the current year the research programs in the fields of housing and of child development and family relationships, begun two and three years ago respectively, were well established. These programs are interdisciplinary in nature and closely related to the over-all university research programs in the social sciences and in housing through the Social Science Research Center and the Housing Research Center respectively. In the field of institution management, the appointment of a full-time research professor gave impetus to the research program. Substantial progress was also made in the clothing research program and a sound project in home economics education was planned and set in motion. Financial support for the latter program must be secured before the research plans that have been developed can be carried into the field-study stage. A substantial amount for this is included in the Request Budget to the State for 1952-53.

While there has been gratifying progress in the development of research in these several areas of home economics, increasing costs and fixed appropriations are beginning to curtail the long established research programs in the fields of economics of the household, household management, and food and nutrition. Additional support is needed to continue these programs at their present high level. Substantially increased support as well as increased space will be necessary for any expansion of the research work beyond the work now under way. As the College continues to expand its graduate and research programs to meet the demands being made upon it for advanced training of personnel for other institutions, the need for available funds and space becomes urgent.

During the year the faculty Committee on Research has continued its study of ways to strengthen the college research program. Emphasis was placed on the consideration of over-all research problems and policies with a view to coordinating the college program. The committee also considered ways to meet the common needs of the research staff for consultation service on statistical design and analysis and for training in research techniques suitable for measuring the attitudes and emotional reactions of people—which techniques are important aspects of research in all areas of home economics.

The National Borden Award of a gold medal and \$1000 for outstanding research in the field of nutrition and experimental foods was awarded to Professor Frances Johnston of the Department of Foods and Nutrition for her work and her publications in the past five years in this field.

Eighteen research studies were completed in the College as follows: One in the Department of Child Development and Family Relationships; two in the Department of Economics of the Household and Household Management; six in the Department of Food and Nutrition; two in the Department of Housing and Design; five in the Department of Institution Management; and two in the Department of Textiles and Clothing.

Thirty-eight additional studies were completed by graduate students as follows: Nine in the Department of Child Development and Family Relationships; four in the Department of Economics of the Household and Household Management; seven in the Department of Food and Nutrition; nine in the

Department of Home Economics Education; two in the Department of Housing and Design; four in the Department of Institution Management; and three in the Department of Textiles and Clothing.

#### EXTENSION

The organized extension program in home economics for adults now exists in 55 counties and three cities and for 4-H clubs in all of the upstate counties. Through this program during the year over 103,000 homemakers and approximately 50,000 boys and girls were enrolled for direct teaching. Figures now available indicate that the 1951 home bureau membership will taper off about 3 per cent. This decline is the first pause in the constant and rapid expansion since 1944 and is attributed to the fact that increased numbers of homemakers are working outside the home either in industry or in volunteer services.

In addition to the homemakers who enrolled for extension teaching, there were many thousands of families who used around 410,000 bulletins, who wrote thousands of letters requesting specific information, and who were influenced by press releases, the 440 radio programs, and 62 television programs by the subject-matter specialists, agents, and Department of Extension Teaching and Information.

Local support for home demonstration work increased 6.4 per cent during the year, making a total of \$498,819 contributed to the home economics extension program by the county organizations. The Federal Government put in \$235,100 and the State of New York put in \$260,401.

Training for agents received particular attention from specialists and state leaders. New appointees were given additional time; economic outlook was presented to home economics trained agents as well as to those in agriculture; training for setting up good exhibits was increased.

Specialists developed newsletters to keep agents informed in subject matter and held district training meetings in order to help more agents and leaders.

Briefly the training program was as follows: The state staff located at the College held 1,172 training meetings for 32,401 volunteer local leaders. The staff also conducted 543 other meetings, attended by 24,531 persons; held 1,671 conferences, and attended 501 professional meetings. In addition to these meetings, home demonstration agents, 4-H club agents, and local leaders located in the counties, but under supervision of the College staff, held an additional 3,434 training schools and conducted over 92,000 other meetings. Home demonstration agents and local leaders held 3,030 training schools and 70,000 other meetings; 4-H club agents held 404 training meetings and 22,376 other meetings.

Efforts toward greater coordination of the program continued. As a result of the excellent support for the consumer education program in marketing by several departments in this College and in the College of Agriculture, work in this field is gaining impetus. Several food forums and market tours were held in the counties; market information for the use of the smaller institutions was assembled and in some areas is being distributed in cooperation with the State Department of Social Welfare. As a result of findings from a Northeast regional farmhouse survey done in 1945-50, a new farmhouse design, based on minimum cost, maximum strength and efficiency and adaptation to the specific needs of farm families, was designed this year. Health programs continue to develop in relation to the many state and community resources.

As a basis for the extension program in the counties, studies were made and program planning guides were prepared for the work with adults and for the 4-H clubs. The Fulton County Study called attention to the practice of the women in the Fulton County Home Bureau in relation to buying and making clothing. Technical assistance was given and main responsibility for this study carried by the Office of Extension Studies. This office also assisted in two other studies: The 4-H club leadership study inquired into how leaders were chosen and why they continued in the work. Work was begun on a cooperative study



with two other states to determine the factors influencing successful extension teaching.

In the counties, local committees were encouraged to review recent programs as a basis for future planning. The Extension Educational Policies Committee worked on a procedure to make such study effective.

To meet changing needs and situations, constant experimentation with methods of teaching and organizational procedure went on as usual during the year. This year specialists experimented with methods for carrying programs that would require less travel to the counties and more time on preparation of materials and outlines for agents or leaders to use. Two specialists worked in one county on farm and home financial planning with 12 young married couples. A new model camp as well as the new farmhouse design for the Northeast, mentioned above, was developed.

County executive committees in two counties asked for the appointment of unit program chairmen in an effort to develop a program which would be suited to the needs of all. Two counties are using television regularly. All counties increased the opportunities for young women to serve in positions of leadership on executive committees or as project leaders.

Through the State Nutrition Committee a handbook for emergency feeding was prepared by specialists and other staff of the Department of Institution Management for the use of the State Defense Commission. A statement calling attention to the need for young mothers to be with their families was prepared for the Commission to consider in relation to the recruitment of volunteers. A specialist was chairman of the subcommittee which set up the statement on family food supply for an emergency.

Many of the increased numbers of foreign students and visitors to the College, mentioned earlier in this report, were interested in extension work. Much time was given to them so that they could see extension work in the College and in the counties. Those students now coming seem to be largely in positions of leadership in their own countries; they prove to be stimulating and demanding students. Families in the counties entertained many of them as guests in their homes. One 4-H club boy was an exchange visitor to Germany. A specialist on her sabbatical leave spent some weeks in England helping to train leaders in the science of food preservation.

ELIZABETH LEE VINCENT  
Dean of the New York State College of Home Economics

## APPENDIX XVII

REPORT OF THE DEAN OF THE NEW YORK STATE SCHOOL  
OF INDUSTRIAL AND LABOR RELATIONS*To the President of the University:*

SIR: I have the honor to present the report of the New York State School of Industrial and Labor Relations for the academic year 1950-51.

The School has as its major purpose the development of knowledge and understanding in the area of labor-management relationships. Functioning as an educational institution in this admittedly controversial field, the School has been fortunate in having extensive and constantly increasing participation and cooperation from labor organizations, business concerns, government and professional groups, as well as from the general public.

## I. INSTRUCTION AND ALLIED ACTIVITIES

Student life, which is rarely calm or uneventful, has reflected the critical times. Uncertainty concerning draft status and military service has inevitably been reflected in student attitudes. The rising cost of living and the expiration of G.I. benefits for many students have required more students to devote increasing amounts of time to self-help activities. In spite of these difficulties, however, the School has carried a normal program of undergraduate and graduate instruction with less disruption than might have been anticipated.

Restrictions on facilities and other resources continue to make necessary a limitation of the undergraduate enrollment to approximately 300 students a term. The aggregate undergraduate registration during the academic year 1950-51 was 327. Present indications are that, barring further deterioration of the international situation, the undergraduate enrollment in the fall term 1951 will be up to the maximum level permitted by our facilities.

Increased recognition throughout the country of the graduate program of the School has been reflected in a substantial increase in the number and quality of applications for advanced work. Present indications are that the enrollment of graduate students for the fall term will approximate 75, the level reached in the fall of 1950. During the past year the aggregate number of graduate students reached 91. It is apparent that the School must continue to give an important share of its attention to work at this advanced level.

*Service to other divisions of the University*

An increasingly important function of the School has been the provision of courses of interest to students in other colleges on campus. The steady increase of other-college registration in ILR courses during the six years of the School's existence represents progress in the integration of the School into the University picture. During the past year the total of these registrations was 714, an increase of approximately 100 over the preceding year and a substantial step from our out-of-college registration of 24 in 1945-46, the first year of the School's existence.

Typical of ILR courses for which other-college students register is "Survey of Industrial and Labor Relations," a course designed specifically for students from other divisions of the University and which is now required of all students in two of the Schools of Engineering. This course alone has enrolled 111 students during the past year and should continue to serve as an effective means of providing an insight into industrial and labor relations for University students.

A new service course has also been provided to meet the needs of students in the College of Home Economics as well as other colleges. This course, entitled "Personnel Problems in Supervision," is of particular interest to students whose future work will involve the supervision of employees but not necessarily direct responsibilities for collective bargaining relationships.

Increasingly, also, specialized courses within the regular curriculum for Industrial and Labor Relations students are utilized by students from other branches of the University. Important among these are the courses in American Ideals, Human Relations, and Personnel Administration, which attract many students from other colleges. The School has also continued a unique course in the field of labor law, offered jointly by a professor in the School and a professor in the Law School.

The School continues to occupy an important place in the provision of statistics instruction for students of the University. Students in the College of Arts and Sciences, the Graduate School, and the School of Business and Public Administration are served by the statistics offerings of the School.

#### *Curriculum Development*

Coincident with the growth of the student body in the last several years, and as an important means of enriching the curriculum of the School, new courses and seminars have been made available to students in the School. Students from other divisions in lesser number have been attracted by these offerings. Included during the past year among these new offerings have been the following: Theories of Industrial and Labor Relations; Comparative Labor Relations, resulting from increased interest in the field of international labor relations; Case Studies in Labor Union History and Administration; and an additional term of basic work in the field of economic and social statistics—a reflection of the increased need for this type of training on the undergraduate level.

The School has continued the practice of utilizing outside speakers and lecturers, not only for special lectures, but also as contributors to regular courses. In the field of Health, Welfare, and Pension Plans the School has been fortunate in obtaining the services of professional consultants in this field. Likewise, in such fields as Collective Bargaining, in Comparative Labor Relations, and in Personnel Administration, the program has been enriched by the utilization of competent outside lecturers from labor, management, and government.

#### *Summer Session*

The School has continued to make available during the Summer Session of the University course offerings in the field of industrial and labor relations, as well as those in the field of industrial education. Inasmuch as the undergraduate students of the School are occupied during the summers with their work-training requirement, the Summer Session offerings have been designed for teachers and professional groups who normally comprise the Summer Session student body, as well as for regular graduate students of the University. During the summer of 1950 the School made available 19 courses in the field of industrial and labor relations and industrial education for an aggregate enrollment of 313.

#### *Resident Faculty*

During the past year the School has lost three of its assistant professors, one of whom took a position as Senior Editor in the Bureau of Labor Statistics in the United States Department of Labor; one of whom took a position as Director of Public Relations for Hartford Accident and Indemnity Company; and one of whom became Educational Director for the Amalgamated Clothing Workers of America.

Two full professors and one assistant professor were on leave of absence during the past year, one serving as the Chief of Statistical Development Staff,

Office of the Administrator, Housing and Home Finance Agency; one serving as Co-Director of a Study of the Problems of the Aged for the Twentieth Century Fund, and one as an Intelligence Specialist in the Directorate of Intelligence in the Department of Defense.

### *Financial Aid*

Financial aid for undergraduate and graduate students has become an increasingly pressing item for consideration. The decline in the percentage of veterans, the exhaustion of benefits under the G.I. Bill, and the rise in the cost of living makes the problem of financial aid increasingly important.

During the past year the School has received the following items of support for its scholarship program:

<i>Daniel Alpern Memorial Scholarship Fund</i>		
The Kraus Foundation	\$ 500.00	
The Mailman Foundation	1000.00	\$1500.00
<i>Frank J. Doft Memorial Fund—Mr. Elliot Doft</i>		750.00
<i>Father William J. Kelley, O.M.I., Scholarship Fund—Local</i>		
No. 3, International Brotherhood of Electrical Workers, AFL		2400.00
<i>Sidney Hillman Memorial Scholarship Fund</i>		
The Sidney Hillman Foundation		2000.00
Total		\$6650.00

The I.B.E.W. Local No. 3 has continued its Father William J. Kelley, O.M.I., Scholarship Program. Under this program two students are currently receiving scholarship awards of \$1,200 a year with funds supplied by the union and administered by the School. It is expected that three such scholarships will be in effect for the year 1951-52, and four thereafter.

The Borden Industrial and Labor Relations Scholarship Award was also inaugurated during the year. This is a prize of \$300 awarded to the senior student who, during his work in the School prior to his senior year, has made the most outstanding academic record.

In addition to the above funds for grants to students, the School has made available four undergraduate tuition scholarships for students primarily from abroad and four graduate tuition scholarships.

### *School Library*

The library of the School has continued to make a major contribution to all phases of the program of the School. The following tables summarize the present status of the library's sources of materials:

<i>Book Collection</i>	<i>June 1950</i>	<i>June 1951</i>
Accessioned Volumes	18,250	21,428
Bound Periodicals (Unaccessioned)	2,551	3,123
Labor Union Convention Proceedings	1,820	2,796
Books and Government Periodicals awaiting accessioning or other disposition	1,700	1,400
Unbound Periodicals (Equated in Vol.)	6,500	6,500
Total	30,821	35,247

### *Documents, Microfilms, and Other Library Materials*

	<i>June 1950</i>	<i>June 1951</i>
Microfilms	547 rolls	755 rolls
Active Files	105 drawers	132 drawers
Storage Files	250 drawers	250 drawers
Current periodicals received regularly	767 drawers	857 drawers
Current releases received regularly	281 drawers	295 drawers

One of the significant portions of the library is its Labor Management Document Center, now constituting what is probably the most comprehensive collection of recent union publications in the United States outside of the Department of Labor Library. Parallel material from management sources has likewise assumed impressive proportions, including annual reports, personnel forms, training programs, and other important source materials.

In addition to its circulation and reference service to students on campus, the library has continued to be of important service to extension classes of the School. Loan service on books carried on through the traveling library section of the New York State library, as well as direct distribution to Extension field offices of current material, have been of importance.

During the last year the library moved to new quarters in the Quonset Hut. While the additional space thus provided was not great, the physical arrangement was much more satisfactory. It is readily apparent, however, that with the intensive use experienced by the library, additional space is urgently needed.

## II. RESEARCH AND PUBLICATIONS

During the past year, twenty-three members of the School staff devoted a substantial amount of time to research work. There were twenty-three different projects on which these staff members worked. Of this number, seven were completed and sixteen were still underway at the end of the year.

These research activities of staff members contributed substantially toward the preparation of the six manuscripts that were printed in the School bulletin series, and to the five manuscripts in process of publication at the end of the year. A number of manuscripts are in process for inclusion in series of publications, known as, "Cornell Studies in Industrial and Labor Relations."

### 1. *Research Projects Completed*

The following projects were completed during the year:

Managerial leadership in a plant of the Moore Business Forms Company, Elmira. Mr. Argyris and Professor Whyte.

Manpower mobilization in the Buffalo Area during World War II. Professor Adams and Mr. DelliQuadri.

Occupational and industrial transfer of workers during World War II. Professor Mullady.

Public and private plans for social security. A study of the impact of public and private plans on the individual wage earner. Professor McConnell and Mr. Risley.

Private pension and welfare plans. A series of case studies. Mr. Puchek.

Use of the injunction in labor disputes in state courts in New York City. Mr. Seidenberg.

A bibliographical survey of World War II experience on manpower problems, wage stabilization problems, and problems of adjustment of industrial disputes. Professor Miller, with graduate student assistants.

### 2. *Research Projects Underway but not Completed at the End of the Year*

The following projects were worked on during the year but not completed:

Union leader—rank-and-file relationships and problems in a machinists' local union, Remington Rand plant, Elmira. Professor Whyte and Miss Remmers. Problems of union leadership in two CIO steelworkers' locals in Dunkirk, New York. Dr. Sayles and Professor Whyte.

Worker, management, and patient relationships in a hospital. Professor Burling and Miss Lentz.

Local labor market study—a study centered on the results of the International Harvester Company's decision to close its Auburn plant. Professors Adams and Aronson.



A study of wage movements in individual industries—comparison of wage trends over the past twenty years. Professor Ferguson.

"Sources of Wage Information." Professor Tolles and Mr. Raimon.

(a) Problems of Wage Surveys

(b) Descriptive listing of 100 surveys by employers' associations

(c) Evaluation of wage surveys of employers' associations.

Arbitration of industrial disputes in England. Professor McKelvey.

History of collective bargaining in New York City department stores. Professor Estey.

Development of arbitration as a means of settling industrial disputes. A study centered on the experience of Dr. Paul Abelson, arbitrator, in leather, clothing, textile, and toy industries. Professor Carpenter.

Personnel practices in upstate hospitals. Professors Brooks and Gordon.

Labor-management relations in nonferrous mining industries, 1930-50. Professor Jensen.

The history and administration of the United Automobile Workers. Professor Neufeld and Mr. Billmyer.

An analysis of worker occupations and industrial mobility—from a subsample of the Old Age and Survivors' Insurance Work History punch card file. Professors McCarthy and Blumen.

A manual on the preparation of written instructional materials. Professor Lynn Emerson.

Journey-to-work patterns of industrial workers—a Housing Research Center project. Professor Adams and Dean Mackesey, College of Architecture.

History and development of codetermination in Germany. Edwin Beal.

### 3. Outside Financial Support

The union leadership project being carried on in the Dunkirk area is being financed by a four-year grant from the W. T. Grant Foundation.

The Journey-to-Work project being conducted under the auspices of the Housing Research Center is being financed by the U. S. Housing and Home Finance Agency. Several temporary assistants have been hired for this project.

Small sums have been received from the Senate Committee on Labor and Education and from the National Security Resources Board to facilitate progress of individual research projects.

### 4. Publications

During the past year, the School published six bulletins:

<u>Title</u>	<u>Author</u>	<u>Date</u>
Introduction to Public Relations	Dave Hyatt	8/50
Out of Work	John N. Thurber	9/50
Seniority Rights for Supervisors?	Rex Kastner	9/50
Improving the Supervision in Retail Stores	Paul Gordon	10/50
Sampling—Elementary Principles	Philip J. McCarthy	4/51
Role-Playing in Action	Chris Argiris	5/51

At the end of the year, two additional manuscripts (for inclusion in the bulletin series) were in process of publication:

<u>Title</u>	<u>Author</u>
Economic Security	John W. McConnell
Day In, Day Out with Local 3	Robert Risley
	M. F. Neufeld

Manuscripts for the new series, "Cornell Studies in Industrial and Labor Relations," are in process of publication:

<i>Title</i>	<i>Author</i>
Wartime Manpower Mobilization	Leonard P. Adams
Manpower, Wages, and Labor Relations in World War II	J. Gormly Miller
AFL Attitudes toward Production	Jean McKelvey

### *ILR Review*

The Review, a quarterly published by the School, represents the principal professional journal in the industrial and labor relations field in this country. The July, 1951 issue rounded out four years of publication. There are approximately 2,500 paid subscribers at present.

### *Books*

The School has published two books through the Cornell University Press—one by Professor V. H. Jensen entitled *Labor Relations in the Nonferrous Metals Industry up to 1930* and one by Professor J. E. Carpenter entitled *Employer Associations and Collective Bargaining in New York City*.

## III. EXTENSION ACTIVITIES

Major formal programs conducted by the Extension Division in its fifth year of operations total 230. In addition, a multitude of informal services were provided to labor, management, governmental, educational, professional, and other groups throughout the State.

### *Emphasis and Trends in Extension Activities*

Many extension programs were oriented to emphasize the impact of mobilization on manpower, training, wage and salary administration, fringe issues in collective bargaining, and on contract negotiation. At the same time, services to military installations were expanded.

Courses in conference and educational methods designed to improve supervisory and training skills were provided for supervisory staff members of the New York Naval Shipyard, the Griffiss Air Base at Rome, the U. S. Naval Hospital at St. Albans, and the Brooklyn Naval Clothing Depot. Courses in human problems of supervision were conducted for the Watervliet Arsenal, the Army depots at Schenectady and Voorheesville, and the Naval Hospital at St. Albans.

Courses on fundamentals of supervision for New York State Civil Service employees, started in Albany on a pilot project basis in 1949-50, were continued in Albany and extended to supervisors in Buffalo and Rochester.

Programs for management and professional groups continued to place strong emphasis on basic human motivations as related to the work of the executive, supervisor, or personnel director in business, industry, and non-profit organizations. Of particular interest were two programs on "Psychiatry for Personnel Workers" provided for members of the Personnel Club of New York for which members of the staff of the Payne Whitney Clinic of the Cornell Medical School served as teachers, and a discussion group on Human Problems in Executive Development conducted for the New York Chapter of the Society for the Advancement of Management. A forum discussion series on Cost Accounting in Collective Bargaining for the New York Chapter of the National Association of Cost Accountants attracted nation-wide attention.

Labor organizations continued their interest in programs on various aspects of collective bargaining, role of the shop steward, parliamentary law, and the conduct of union meetings. But there was also evidence of a growing interest

in human relations and in community and public relations of labor unions. Courses in human relations were provided for locals of the International Association of Machinists, the Amalgamated Clothing Workers, the United Automobile Workers, and the Cement and Concrete Workers. Courses in community relationships were conducted for union leaders in Niagara Falls and for Local 3 of the International Brotherhood of Electrical Workers, AFL. Community relationships were also emphasized in the two on-campus institutes held for the United Steelworkers of America, CIO, and for the Federal Labor Unions of the AFL. At the request of a number of unions the School conducted courses in Time and Motion Study and Job Evaluation as related to the handling of grievances on wage problems.

Although the Extension Division has conducted specialized programs in New York City during the past several years, courses for the general public in New York City were offered for the first time during 1950-51. Four programs in the form of introductory courses in industrial and labor relations were offered in high schools in various sectors of the city. One, in Harlem, was conducted in Spanish because of the large number of Puerto Rican workers in that area.

#### *Communities Served*

In its early years the extension program was confined primarily to the larger industrial cities. It has gradually spread to more and more of the smaller and medium size communities of the State. During the current year one or more programs have been carried on in some 40 communities. Among the communities served this year for the first time were Gloversville, Plattsburg, Voorheesville, Endicott, Horseheads, Newark, Norwich, Painted Post, Poughkeepsie, Lockport, Olean, Freeport, and Great Neck. As in earlier years educational programs continue to be made available in all major industrial centers of the State.

#### *Types of Program*

In each community, extension programs have been developed on request and after discussion with interested groups and community leaders. Formal programs have been of four general types:

- a) Lecture series for labor, management, and the public.
- b) Community courses for labor, management, and the public.
- c) Specialized programs to meet specific educational needs of labor, management, and governmental organizations and other groups interested in industrial and labor relations.
- d) Conferences and institutes.

#### *Community Courses*

Thirty-nine programs with a registration of 1,167 were conducted as community courses, usually meeting one evening a week for a period of from six to ten weeks. Such classes attracted a cross-section of representatives from labor, management, government, and the public. An attempt was made to diversify these programs in the larger industrial areas so as to appeal to persons in various occupations and with varying levels of work responsibility.

#### *Specialized Programs*

There was an increased demand for educational services of the School to meet specific problems of labor, management, professional organizations and other groups interested in industrial and labor relations. As a result, 183 such programs were conducted with a registration of 4,956. These services included classes, seminars, and lecture-discussion series. The subject matter of each program was closely related to the needs and to work situations of those enrolled. Management organizations, government groups, AFL, CIO, and independent unions and professional organizations all participated substantially in these programs.

*Conferences and Institutes*

Eight extension conferences and institutes were held on the Cornell campus and in upstate communities. These included two programs for labor unions, two for hospital administrators, and one each for training directors, management executives, and teachers of industrial and technical subjects. In addition, an Institute on Mobilization Problems conducted in Albany drew a cross section of labor, management, government, and educational representatives. Registration for such programs totaled 390.

*New Groups Requesting Services*

Programs have been requested by and made available to a number of groups which have not heretofore utilized the services of the Extension Division. These include such organizations as the New York City Chapter of the National Association of Cost Accountants, the Albany Junior Chamber of Commerce, the Training Council of the Syracuse Manufacturer's Association, the Syracuse Management Club, the Industrial Management Club of Lockport, the Cornell Women's Club of New York City, the Retail Division of the Waverly Board of Trade, the New York City Health and Tuberculosis Association, and the New York City Chapter of the Society for the Advancement of Management.

Locals of international unions which requested extension programs for the first time included the locals of the United Silver and Cosmetic Workers, CIO, Newark; the American Flint Glass Workers, AFL, Corning; the International Union of Electrical Workers, CIO, Painted Post, Schenectady, and Jamaica; Local B51 of the International Alliance of Theatrical Stage Employees, New York; and the Furniture Workers, CIO, in Buffalo. Requests were also received for the first time from the Independent Textile Workers Union in Glens Falls.

Among the organizations which have participated for the first time in the School's educational programs for supervisors have been the Pal Blade Company, Plattsburg; Mica Insulator Company, Schenectady; Denby's Department Store, Troy; International Business Machines Corporation in Endicott and Poughkeepsie; National Homes Corporation, Horseheads; H. F. Binch and Company, Glens Falls; Daystrom Electric Corporation, Poughkeepsie; Norwich Pharmacal Company, Norwich; Continental Can Company, Utica; Bliss and Laughlin and Trico Products, Buffalo; Fein Tin Can Company, New York City; Statler Hotel, New York City; and Fleishmann Division of Standard Brands, Peekskill.

*Statistical Summary of Extension Activities*

A brief statistical summary of extension activities follows:

<i>Types of Program</i>	<i>Number of Programs</i>	<i>Number Enrolled</i>
Community classes . . . . .	39	1167
Specialized programs . . . . .	183	4956
Conferences and Institutes . . . . .	8	390
Totals . . . . .	230	6513

*Informal Services*

Members of the Extension staff are increasingly being asked for assistance of an informal nature in connection with educational activities of various groups. Examples of such service were: aid given by the School staff to the Industrial Relations Association in Buffalo in planning an institute on Industrial and Labor Relations; assistance given to the New York Chapter, Independent Association of Public Employment Services in developing a conference on problems of Communications; the conduct of a number of radio programs or panel discussions for various groups in the western part of the state; conduct of a series of luncheon discussions on Industrial and Labor Relations at the Town

Hall Club, New York City, conduct of an experimental discussion program for members of the New York Chapter, Society for the Advancement of Management, on problems of executive development; lecture-discussions on industrial and labor relations for the Chenango and Unadilla Telephone Company in Norwich to meet the required training in such subject matter for the company's apprentices; and assisting labor and management groups to develop their own educational programs in various aspects of industrial and labor relations.

In a number of instances the educational programs offered by the School have been effective in stimulating other groups to carry on further with the development of educational programs, organized, administered, and financed by the groups of organizations concerned.

#### *Cooperation with Educational Institutions*

A number of programs were conducted with the cooperation of other educational institutions and agencies. Adult and vocational education representatives of the State Department of Education gave advice and consultation on community needs and cooperated in the development of a number of programs.

At the request of the New York City Board of Education, two courses for teachers were provided on "The Role of Labor Management in the United States Economy" and on "Labor, Management, and Public: 1900-50." In similar fashion a program was developed for teachers in Poughkeepsie on "Survey of Industrial and Labor Relations." All three courses carried in-service credit for those who attended.

The Triple Cities units of the State University, Harpur College at Endicott, and the Institute of Applied Arts and Sciences at Binghamton, cooperated with the Extension Division in offering a course in "Motivation and Morale" in the Institute's building. One of the School's faculty conducted an extension program on Methods in Industrial Teaching for the faculty of the Institute of Applied Arts and Sciences at Utica, also a unit of the State University. Other units of the State University and various other educational institutions provided classrooms and extension teachers from their faculties and cooperated in planning activities to meet local needs.

#### *Extension Teaching Staff*

Teachers and discussion leaders for extension courses have been recruited either from the School staff or from competent personnel in localities where the programs were conducted. One hundred and three teachers comprised the instructional staff for community classes and specialized programs. Of these, eleven were members of the School staff. The remaining instructors were drawn from a variety of backgrounds and occupations, principally from other educational institutions and government agencies, and were hired for the specific course or courses they conducted. Of this group, 46 had taught for the Extension Division in prior years. The educational program has been greatly enhanced by the development of continuing relationships with such persons who are familiar with the School's purposes, policies, and procedures.

Regional conferences and a two-day state-wide conference of extension teachers were held to help the teachers further orient themselves to the School's program and to provide an opportunity for them to discuss mutual problems and teaching methods found helpful in solving these problems.

### IV. INTERNATIONAL PROGRAMS

#### *Foreign Study Groups*

During the past year, several groups from foreign countries have visited the School. Most of these groups have been sponsored by some Federal Government agency such as the Department of Labor, Economic Cooperation Administration, and the State Department.



In the spring of 1950 three groups of German union and government officials visited the School in succession. Each group stayed two weeks and for each a special program of lectures and discussions was developed and conducted by the School's Extension Division, with the help of other members of the faculty of the School and the University.

In the spring of 1951 at the request of ECA the School conducted a special program for a group of seven French leaders in government, management, and unions. This group spent two weeks on the campus and then, accompanied by a member of the School's staff, made a six weeks' tour contacting industrial plants and union organizations in the east and middle west. The group then returned to the School for the preparation of reports and a discussion of findings.

At about the same time the French group was here, a group of three Norwegians also sponsored by ECA were guests of the School. Their program was of the same type as that developed for the French. These Norwegians represented labor, management, and the government and were top-flight leaders in the industrial relations field in their country. They visited several universities and a wide variety of industrial establishments, accompanied by a representative of the School.

On June 28, 1951, a group of seventeen Turkish technicians, sponsored by ECA, were met in New York City by a member of the School's staff. They will spend six months studying on the campus and visiting industrial establishments.

Plans are being worked out with the U. S. Department of State for the School to provide a nine-month on-campus program for twenty-five young German youths beginning with the fall term 1951-52.

#### *Research*

Three research projects relating to international industrial and labor relations problems have been undertaken by the staff and graduate students of the School.

A study of the Soviet Iron and Steel Industry is being completed by a member of the staff for publication by the Harvard University Press.

A study of the Foreign Policies of American Trade Unions was completed by a graduate student.

A graduate assistant is working on a study which will cover the development and ideological basis for the Codetermination Law in Western Germany.

#### *Proposed Program in International Industrial and Labor Relations*

In recognition of the need for educational leadership in developing programs for foreign groups, training American youth for foreign assignments, and developing the basis for better understanding of foreign problems, the School hopes to develop an expanded program in this area. Plans call for expansion of resident instruction to provide more adequate coverage of foreign and international developments, additional work with foreign study groups and with American practitioners interested in foreign affairs, and the development of a research program that will provide the groundwork for improving industrial and labor relations both at home and abroad.

#### V. PROBLEMS AND NEEDS

In addition to a number of other problems and needs to which reference has been made, the most pressing problem with which the School is faced relates to adequate permanent facilities for housing the School. At present the functions of the School are scattered among seven different buildings on the Cornell campus, but the major activities are carried on in temporary structures. These temporary structures require a high level of maintenance expenditures and even with repairs and rehabilitation cannot meet the needs of the School on any more than a temporary basis.

It is expected that, as soon as new accommodations are developed for the College of Veterinary Medicine at the east end of Tower Road, the present

site of the Veterinary College will be available for the School. This will require rehabilitation of Moore Laboratory and new construction on the site of James Law Hall, which is marked for demolition. The achievement of this sequence of events involving new facilities for the Veterinary College and the development of facilities for the School of Industrial and Labor Relations is of the highest order of importance for the School.

M. P. CATHERWOOD  
Dean of the New York State School  
of Industrial and Labor Relations

## APPENDIX XVIII

### REPORT OF THE DEAN OF THE SCHOOL OF BUSINESS AND PUBLIC ADMINISTRATION

*To the President of the University:*

SIR: I have the honor to present this report of the School of Business and Public Administration for the academic year 1950-51.

#### THE STUDENT BODY

At the beginning of the academic year, 110 students were registered for full-time instruction in the School. Forty-three of these were in the second-year class, 40 of them subsequently obtaining their Masters' degrees. In the first-year class, there were 67 students of whom 32 were double registrants from the undergraduate divisions of the University. In the student body as a whole, 37 different undergraduate institutions were represented, including 4 foreign institutions. These figures do not include 21 special students from France here in the spring under Economic Cooperation Administration sponsorship. This program is discussed separately below.

All indications are that during the coming year we shall continue to draw our students from about thirty to thirty-five undergraduate institutions with approximately half of them coming from Cornell. It is also apparent that we shall continue to attract good students from several foreign countries. It is, however, becoming increasingly evident that we must be able to offer much additional financial aid to deserving students if we are to attract them to Cornell. At present the School has only \$3,000 a year available for scholarship awards. With the ending of veterans' benefits, it becomes increasingly difficult for many young men and women to extend their education to five or six years. The School must have additional funds for student aid in the immediate future.

The employment record of the class graduating in June, 1951, is excellent. Of 40 students graduating this year, 22 are now in private industry, 12 in the armed forces, 4 are with the Central Intelligence Agency of the federal government, and 2 are in academic administration. This has been, of course, an unusually good year in which to find employment. Nevertheless, the School and the University Placement Office under Director John L. Munschauer have done an excellent job in helping our graduates find employment opportunities. I am particularly pleased that 4 graduates have passed the very rigorous employment tests of the Central Intelligence Agency. It is interesting to note that our graduates continue to distribute themselves about 90 per cent in private industry and 10 per cent in government, not counting the group taken by the armed forces.

## THE FACULTY

In December, 1950, Cornell suffered a severe and tragic loss in the sudden death of Associate Professor Elias Huzar. Professor Huzar's primary duties were in the College of Arts and Sciences, but he was a member of our Faculty, and he contributed greatly to the strength of our work in public administration. He was an outstanding authority in the field of the federal defense agencies.

The resignation of Professor Delbert J. Duncan to accept a position at the University of California is a hard blow to our work in marketing and distribution. He contributed much to the development of the School. It will be difficult to replace him. The opportunity of teaching at the University of California and of working with the leading department stores of San Francisco in developing executive training programs was, unfortunately, more attractive to him than anything we can now offer at Cornell and in Ithaca.

During the first term of the academic year, Professor de Chazeau was on part-time leave of absence to prepare a special monograph on the petroleum industry for the Yale University Press, one of a series being done at Yale with the aid of an outright gift from the American Petroleum Institute.

Assistant Professor James W. Partner has undertaken the general supervision of a research project in the marketing of prefabricated houses with funds obtained from the federal government by Cornell's new Housing Research Center.

Professor Edward H. Litchfield has been named secretary-treasurer of the American Political Science Association and has given much time to setting up the Association's new Washington office.

During the spring term, Associate Professor William H. Childs has had part-time leave of absence to do special work with Arthur Young and Company, the New York professional accounting firm.

Professor William H. Shannon has been called to duty with the United States Navy this summer, with the rank of Commander, to assist in the organization of a special training program for the Bureau of Supplies and Accounts.

I am particularly happy to be able to report the promotion of Schuyler D. Hoslett to associate professor and his designation as assistant dean of the School.

Professor Arthur E. Nilsson is serving effectively as a member of the executive committee of Cornell's Housing Research Center where his broad training and experience can be exceedingly useful.

Professor John G. B. Hutchins has been active in the affairs of the Economic History Association and the special committee on Research in Economic History.

THE ECONOMIC COOPERATION ADMINISTRATION PROGRAM FOR  
FRENCH EXECUTIVES

During the spring term, at the request of the Economic Cooperation Administration, the School offered a special twelve weeks' training program for twenty-one French executives, fifteen from private business and six from the French government. Assistant Professor Hoslett directed the work most effectively. He received excellent cooperation from members of our own Faculty and from the Faculty of the School of Mechanical Engineering. The result was an intensive and rigorous program of instruction in the methods, practice, and policies of American industry and commerce, especially in their relation to the relatively high productivity of the American economy. The French students proved to be exceedingly keen and apt pupils. Moreover, they were excellent ambassadors for their country. Their relations with our own students were most friendly. All of us in the School feel that we derived great benefit from their presence on the campus. In all probability we shall have a similar group here during the fall term. The experience we are getting with this special sort of "advanced management program" should prove quite

valuable when we move, as we plan to do, to set up a program for American executives and civil servants.

#### THE THIRD ANNUAL MANAGEMENT CONFERENCE

In February the School conducted its third annual management conference, this year's subject being "Mobilization." Once again the student committees planning the conference, with only a slight amount of Faculty help, obtained an excellent group of speakers. The papers delivered were well prepared, the discussions were lively, and the attendance was good, though each year we hope to see more outsiders become aware of the high quality of these conferences. The proceedings of the Conference have now been published and will be given general circulation as were the proceedings of the Second Conference on "Security in an Enterprise Economy."

#### THE PUBLIC ADMINISTRATION CASES RESEARCH PROJECT

During the past three years the School has cooperated with its counterparts at Harvard, Princeton, and Syracuse in a special research project aiming at the development of substantial and realistic case studies in public administration. With the aid of a \$100,000 grant from the Carnegie Corporation, a body of substantial case material has been carefully gathered and prepared for publication. Within the next few months a casebook of some 600,000 words will be made generally available for use in educational institutions, including those government departments which operate their own training programs. I believe that this project will have an important effect on instruction in public administration in the United States. My own participation in the project has been somewhat time-consuming but very much worth while. I am glad to report that the public administration cases project will continue to go forward with a much broadened list of participating institutions to which Cornell, Harvard, Princeton, and Syracuse have shown the way.

#### GENERAL CONDITION OF THE SCHOOL

The School of Business and Public Administration has just completed its first five years of actual operation. In my annual reports for those years I have dealt with its accomplishments and tried to indicate its needs and its unsolved problems. On at least three occasions, at their requests, I have presented to the successive fund-raising officials of the University's central administration detailed statements of the School's financial needs. On one other occasion, at the request of your immediate predecessor, I presented a statement of our needs to the finance subcommittee of the Board of Trustees. Up until the present, the School has received not one dollar as a result of these statements of need. The only money we have received outside our regular annual budget has been the few thousand dollars I have been able to obtain for scholarships and for furnishing our student lounge.

The School's annual budget has been cut back equally with the budgets of the older and well-established divisions of the University just at the very time when we needed more money, not less, in order to go forward with the momentum of our reasonably good early start. This, in my opinion, reflects the unfortunate application of rigid and unimaginative judgment on the part of those persons in the central administration who, during the past two years, have set the budget limits within which the deans have had to work. Henceforth, it is my intention to present my budget requests limited only by my best judgment of the needs of the School.

Present budget provisions not merely are inadequate to permit the School to develop, but they are actually inadequate to permit it to maintain the level attained in 1948-49.

The Faculty of the School have been giving serious and, I believe, constructive thought to the development of the future program of the School. They

conceive the School's mission to be what the special committee of the University Faculty conceived it to be ten years ago when it recommended the establishment of the School—the training of effective private and public administrators, not mere technicians but men and women at least some of whom will eventually rise to positions of the highest importance in industry and in the public service.

Such an advanced professional school is necessarily expensive to operate. It must pay relatively high salaries; it must provide its faculty with better-than-average working conditions; and it must be able to offer much financial aid to students of superior quality but thin pocketbooks. Some persons may say that Cornell cannot afford such a school. But I wonder if Cornell really can now afford not to have such a school. The one thing it certainly cannot afford is an inferior substitute. I shall conclude this report by saying that Cornell now has the nucleus of an excellent and really unique school. The Faculty of the School has a plan for its development. The dean of the School will make the budget requests necessary to carry the School forward. I believe we have the right to expect that substantial additional funds will be made immediately available for the School and that plans will be put into operation to obtain steadily increasing financial support for the School in the years ahead.

PAUL M. O'LEARY

Dean of the School of Business and Public Administration

## APPENDIX XIX

### REPORT OF THE DIRECTOR OF THE SCHOOL OF EDUCATION

*To the President of the University:*

SIR: I have the honor to present the report of the School of Education for the academic year 1950-51.

Inasmuch as this year marks the beginning of a new administration for the University, it would seem to be appropriate and helpful to make a brief statement of the organization, purpose, and scope of the School of Education at Cornell. Unlike most university organizations, it is not an autonomous college. It is rather a coordination of departments and divisions of education throughout the University. It utilizes the resources of all of the colleges in the preparation of teachers. Provision is made for the integration of both undergraduate and graduate professional programs of students preparing for secondary or college services. Graduate students may take majors or minors leading to advanced degrees in such fields as administration, supervision, curriculum construction, secondary education, educational psychology, extension education, guidance and personnel administration, home economics education, industrial and technical education, science education, nature study, conservation education, history of education, philosophy of education, agricultural education, rural education, and social studies education.

Students in any of the colleges at Cornell who expect to prepare for teaching are carefully screened at the beginning of their sophomore year, in terms of fitness for professional education. If they are approved on the basis of academic and personality criteria for admission to this curriculum, they then face the dual objectives of meeting the college requirements for graduation with a B.S. or a B.A. degree and of completing the professional program leading to certification as a secondary school teacher in New York State. When they anticipate teaching subjects for which a fifth year of work is required, they must be admitted to the Graduate School as candidates for Masters' degrees, with a major in some field of education, for their last year's work.



In addition to the completion of a major in a subject matter field in one of the colleges, applicants for this preprofessional work take the following general and professional courses: one year of social science and one year of human growth and development, one course each in educational psychology, social foundations and philosophy of education, and at least a ten-semester hour unit in the art of teaching. The art of teaching provides for the integration of all professional aspects of teaching, including the selection and organization of content in one field of instruction. Among the elements commonly considered in all fields in this unit are special methods, observation and demonstration teaching, curriculum and course of study making, extrainstructional activities and responsibilities, and community relationships.

For applicants who have had teaching experience, Cornell offers two other professional degrees in addition to the traditional Masters' and Ph.D. degrees. All of these degrees are under the general jurisdiction of the Graduate School. The Master of Science in Education degree is designed for those who desire to become specialists or further their professional competence as teachers, while the Doctor of Education degree is planned for candidates preparing for positions of leadership in education as administrators or college teachers.

For the current year enrollment figures for candidates for the various graduate degrees and total enrollment figures for the undergraduate classes are shown in the accompanying tables. A recent study of candidates for teacher training programs in New York State shows that Cornell students were highest in mental ability. The graduate students are limited in number to maintain the relatively favorable ratio of student to teacher at Cornell and are selected from a large number of applicants.

Recent enforcement of the legislation by the state requiring a five-year program for teachers in the secondary schools, the fifth year of which must be graduate work, has created a serious dilemma for us in the Arts and Sciences division. Formerly, the one man assigned to direct the preparation of students desiring to teach English, history, social studies, mathematics, or languages, could, with the aid of supervisors in the Ithaca Public Schools and some assistants, do a satisfactory job training these students. Now, however, with the state requiring each person to complete a year of work in the Graduate School, we are in need of help. Unless an additional staff member is provided, it will be necessary for us to discontinue the training of most of our teachers in the College of Arts and Sciences at the end of the fourth year.

University legislation raising the tuition for graduate students who major with a professor in the endowed colleges, while those who major with a professor in the contract colleges pay at the old rate, creates an inequity that should receive serious consideration.

During the 1950-51 academic year, the Educational Placement Bureau has been requested to recommend candidates for a total of 1,445 positions. Of the 197 placements made, 58 were on the college level and the remainder in secondary school positions. In view of the fact that many colleges are curtailing their teaching staffs for the ensuing year, it has been more difficult to get all of the graduates of the School of Education placed, but practically all of them are already placed at higher salaries than ever before obtained in the history of the placement service.

TABLE I. GRADUATE STUDENT ENROLLMENT, 1950-51.

I. Number of different students registered:	
a. With Education as a major.....	169
b. With Education as a minor.....	43
	<hr/>
	212
II. Number who are candidates for:	
a. Ph.D. or Ed. D. (major in Education).....	70
b. Ph.D. (minor in education).....	17
c. M.S. in Education or Master of Education.....	59
d. M.A. or M.S.....	54
e. Other degrees.....	3
f. No degrees.....	9
	<hr/>
	212
III. Geographical distribution:	
a. Number of different states represented.....	31
b. Number of foreign countries represented.....	7
c. Number from New York state.....	100

TABLE II. UNDERGRADUATE STUDENT ENROLLMENT, 1950-51.

Rural education.....	719
Home economics education.....	132
Education in academic fields.....	140
	<hr/>
	991

A. L. WINSOR  
Director of the School of Education

## APPENDIX XX

### REPORT OF THE DIRECTOR OF THE SCHOOL OF NUTRITION

*To the President of the University:*

SIR: I have the honor to present the report of the School of Nutrition for the year 1950-51.

#### RESEARCH

The major objective of the research program of the School is the solution of problems which particularly call for the coordinated efforts of a team of scientists from the various fields represented by the School's organization. A brief summary is here given of the more important activities during the past year.

The results of the previously reported Groton nutritional status survey in which medical scientists, nutritionists, biochemists, and social scientists co-operated, have been published in a series of six articles. In cooperation with the Medical College and Cooper Union, analysis has been completed of the 250 seven-day diet records obtained from the nutritional status study of Cooper Union students in October 1949 and of the 145 records obtained in October 1950. In general, the nutrient intakes are good. The dietary data illustrate how

nutrient requirements may be met by a great variety of dietary patterns. They are now being correlated with findings from blood studies and physical examinations. The School has continued its cooperation in the nutritional status study being carried out by the Cornell Experiment Station as a Research and Marketing project. Members of the staff have prepared eight papers for publication from this research in the past year. A seven-day dietary study of some 60 Cornell men, sampled in a random fashion from the student body to be representative in terms of class and college distribution, is under analysis. Study is being made of food habits and usage as well as of nutrient intake.

Medical and nutritional scientists of the School have been giving considerable attention to the currently much studied and debated question as to whether foods high in cholesterol, such as eggs, milk, and organ meats, contribute to the onset and severity of arteriosclerosis. This question has a large significance to nutrition, to agriculture, and to the food industry, as well as to health, because these are all nutritionally superior foods and also very important livestock products. The studies have dealt with the effect of diet on cholesterol and total lipid levels in the blood of women of different weight and build, and on the lipid levels of patients with suspected or proven coronary atherosclerosis. Both on the basis of this research and of an analysis of studies reported by many other scientists, the School feels that there is little justification for any general recommendation that intakes of cholesterol-containing foods should be decreased for the prevention or treatment of arteriosclerosis. The restriction of lipids as a group, however, may be of importance in certain situations.

It is becoming increasingly appreciated that over-weight may be the most important nutritional problem in adults. The School is accordingly devoting considerable attention to this problem. Ten over-weight college women have been extensively investigated for 15 weeks at the Special Diet Table, involving various studies of energy metabolism and physiological status. Clinically the work has been very successful. The metabolic data are still being processed in the laboratory.

The administration of nutrients by other paths than the digestion tract is called for in certain conditions arising from disease or accidents. The utilization of protein, except via the intestines, has been questioned. Studies in the School during the past year carried out with rats, have shown that the intraperitoneal injection of protein results in the utilization of this nutrient, as measured by growth and protein storage. Anaphylaxis was not found to be a problem with frequent injections of rather large quantities of the proteins tested, raw egg white and bovine plasma. Other basic physiological studies have dealt with amino acid metabolism and with unidentified components of the vitamin-B complex.

To obtain specific information as to why many New York State people with adequate incomes fail to eat a nutritionally satisfactory diet, two lines of investigation have been initiated. One study is dealing with food likes and dislikes, and possible explanations in terms of social and cultural backgrounds. The other study has been planned to find out what homemakers know about food and nutrition as applied to feeding their families and what sources of information are utilized. The results of these two studies should be of value to all agencies interested in the nutrition of New York State people and provide the basis for a more effective program of nutrition education.

These various research activities of the School have resulted in the publication of some 30 articles in technical and scientific journals and of a number of popular articles in trade papers and other media reaching agricultural and industrial groups and the general public.

#### DISTRIBUTION OF MILK BY VENDING MACHINES

A program having both research and extension aspects has been concerned with the distribution of milk through mechanical vending equipment. This project was started in the belief that a larger consumption of milk, which

would benefit the dairy industry as well as many consumers, might result if the milk were available in a palatable form at more times and places, as would be possible by the use of vending machines. To test this belief and the practicability of this method of distribution, the operation of vending machines of different types has been investigated on the Cornell campus and in office buildings, schools, and factories. Consumer preferences for different kinds of milk and the effect of selling prices upon sales and profits have also been under study. Results have been most gratifying in showing that, under appropriate conditions, vending machines provide a practical method for distributing milk and increasing its consumption. During the year approximately 70,000 units (one-half pints) were sold in two buildings on the Cornell campus, representing consumption which occurred largely between meals. It was found that with vending machines placed side by side, milk at 10 cents a one-half pint would outsell a soft drink at 5 cents a bottle. The principles governing the successful operation of milk vending machines in various locations and potential markets have been established.

Preliminary and partial reports of the results of this study have been made in various trade journals and other media in the course of the year. Several talks have been given before industrial, agricultural, and consumer groups. The project has attracted nation-wide interest, as is indicated by the receipt of over 200 letters from dairies, the vending industry, schools, public officials and others, asking for reports of the results and for information applying to specific situations. A detailed report of the results is now being prepared. The project has been carried out with the cooperation of the Department of Dairy Industry of the College of Agriculture and of the State Department of Labor.

## INSTRUCTION

The registration during the year has been as follows:

	<i>Fall Term</i>	<i>Spring Term</i>
<i>Single Registrants:</i>		
Master of Nutritional Science.....	20	20
Master of Food Science.....	10	10
Special Students.....	6	7
Total.....	36	37
<i>Double Registrants:</i>		
Master of Nutritional Science.....	4	3
Master of Food Science.....	1	2
Total.....	5	5

The following degrees were awarded in the course of the year:

Master of Nutritional Science.....	7
Master of Food Science.....	6
Total.....	13

The School has been requested to give an extramural course in public health nutrition, in 1951-52, for public health nurses, social workers, and nutritionists.

## COOPERATION WITH THE STATE AND COUNTY HEALTH DEPARTMENTS

The School has continued to cooperate with the State Health Department on various nutrition activities. A member of the staff of the School spends a large share of her time serving as public health nutritionist with the Tompkins County Health Department. This program has become of increasing impor-

tance. One interesting development is the nutrition counselling to patients referred by private physicians. Some 102 patients of 10 private physicians have been counselled with 85 follow-up visits. In addition 43 individuals have been counselled indirectly through the medium of the public health nurse. The County Health Unit is becoming more and more a training center for public health officers, health educators, public health nurses, and nutritionists sent by the State Health Department or other institutions. The nutritionist makes important training contributions to these individuals. She is taking an active part in the local Nutrition Committee and also has acted as a consultant to the Welfare Department in setting up low-cost diets and special diets prescribed for Welfare patients by physicians.

#### NUTRITIONAL COUNSELLING AND DIET TABLE

Continuation of nutrition counselling services and of the special diet table has been made possible through the generous support of Mr. Frank Gannett. At the Medical Clinic some 110 new patients have been served, including a total of 315 consultations. In addition to its service to students requiring special diets, the facilities of the diet table have been utilized in the research on weight control and on cholesterol, as previously mentioned.

#### H. E. BABCOCK MEMORIAL FUND

Following the untimely death on July 12 of Mr. H. E. Babcock, there arose a spontaneous movement among his many friends in the University and the Board of Trustees, in agriculture, and in industry to establish a memorial to his memory. It seemed especially appropriate to establish the memorial in Cornell University to which Mr. Babcock had given so many years of outstanding service, as chairman of its Board of Trustees and in many other capacities. The Board therefore approved a campaign to raise an H. E. Babcock Memorial Fund of \$500,000 to endow a professorship and to provide supporting funds, to carry forward the broad program dealing with the interrelations between agriculture, human nutrition, and health, which was initiated and promoted so effectively under his inspired leadership. It was also decided that this professorship should be located in the School of Nutrition for the founding and development of which Mr. Babcock was so largely responsible.

Stimulated especially by the efforts and generous gifts of Mr. Babcock's friends on the campus, in the Board of Trustees, and in the Cooperative G.L.F., Inc. and its affiliates, the fund quickly reached a total of over \$300,000. As a result Dr. Herrell DeGraff was appointed, effective July 1, 1951, as Babcock Professor of Food Economics in the School of Nutrition. He was given the general responsibility for promoting through education and research a broader understanding of the importance of a better diet as a matter of public policy, for the mutual benefit of agriculture, the food industry, consumers, and the national economy. The campaign for supporting funds is being continued.

#### CHARLES J. QUILLMAN, JR., FELLOWSHIP

In the fall of 1950 the School made the first award of the Charles J. Quillman, Jr., Fellowship. This fellowship was established by Trustee Francis Scheetz and his sister, Mrs. Sara Quillman, in memory of her son who had been accepted for admission to Cornell but died in Germany in World War II. The purpose of the fellowship is to support basic research in biochemistry and biophysics and thus promote the discovery of basic facts in one or more fields of science.

#### EXTENSION ACTIVITIES

An important feature of the School's over-all program is to aid in the extension of food and nutrition knowledge and its applications to all concerned



with the production, processing, distribution, and use of food, and to all professional and lay workers in the field of nutrition and health.

As a service to the medical profession a series of editorials on topics dealing with the relation of nutrition to health have been published in the New York State Medical Journal. A special contribution, published in this journal dealt with the advances in nutrition during the past 50 years. Talks have been given before various organizations concerned with the broad field of nutrition and health, including Schools of Public Health, Medical Societies, State Dietetic Associations, State and City Nutrition Bureaus, the American College Health Association, and others. Talks have also been given before such lay groups as Parent-Teacher Associations, City and County Food and Nutrition Committees, Women's Clubs, and School Lunch Workshops.

Talks on food and nutrition problems of interest to agriculture have been given before the annual convention of the National Council of Farm Cooperatives, the National Institute of Animal Agriculture, and various farm organizations. The food and feed industries have been served by talks at the Cornell Nutrition Conference for Feed Manufacturers and at meetings of the Institute of Food Technologists, the New York State Frozen Food Locker Association, and various local groups interested in food processing.

The School in cooperation with the Department of Biochemistry and Nutrition of the College of Agriculture conducted a Nutrition Clinic during the annual Farm and Home Week, attended by approximately 1,000 persons. These persons were given information on the medical aspects of nutrition and various clinical tests, which included chest X-rays, blood sugar and hemoglobin, blood pressure, and height-weight measurements. Specific food and nutrition advice was given to all who requested it. The School was a joint sponsor of the Annual Meeting of the New York State Nutrition Institute and four members of its staff participated in the program. Staff members have also participated in other nutrition institutes held in the State.

#### SPECIAL GRANTS

A state appropriation of \$100,000 for the support of the School program was continued, through the State University. The following special gifts and grants were received:

\$5,000 from Mr. Frank Gannett for the support of the counselling service, diet table, and related research activities.

\$1,500 as the income from the Charles J. Quillman, Jr., Fellowship for basic research.

\$3,500 from the Nutrition Foundation for studies of the newer members of the vitamin-B complex.

\$1,500 from the Robert Gould Research Foundation for research on lactation.

\$7,940 from the Air Force for work to be done on edible plants of Alaska.

\$3,000 from the Office of the Quartermaster General for studies of army rations.

#### FACULTY CHANGES

Assistant Professor Charles R. Shaw was called to active duty by the Air Force in April. Dr. Herbert Wiegandt, Associate Professor of Chemical and Metallurgical Engineering in the School of Chemical and Metallurgical Engineering, has been given a joint appointment in the School of Nutrition under the same title.

L. A. MAYNARD

Director of the School of Nutrition

## APPENDIX XXI

## REPORT OF THE DIRECTOR OF THE SUMMER SESSION

*To the President of the University:*

SIR: I have the honor to submit on behalf of the Administrative Board of the Summer Session the following report for the Session of 1950.

By action of the Board of Trustees, Professor Grace Steininger was appointed to the Administrative Board, replacing Margaret Hutchins, whose term expired.

The total enrollment for the Session, 1,990, was the lowest since 1945 and represented a decline in attendance for the second successive year. Among the causes for a smaller registration, experienced by most summer sessions throughout the country, were a return of undergraduates to the normal four-year pattern of education and a sharp decrease in the number of veterans using educational benefits. In total attendance and in the ratio of undergraduates to graduate and special students, this Session is like those of the period from 1935 to 1939. It is likely that planning for the immediate future can be predicated on an attendance of approximately two thousand students.

As indicated by one of the following tables, in the University departments of the Session there was a decrease in the proportion of total credit hours, while each of the other divisions gained. This situation, discussed in the 1949 report, remains as the most serious problem of the administration.

The curriculum for 1950 was similar to that of the preceding year. New courses were offered in the language arts, in elementary education, in conservation, in radio, and in the history of New York. A workshop on the school plant, under the direction of Professor J. E. Butterworth, brought together the resources of several Cornell departments as well as those of the state and national divisions of education. Workshops were offered in the fields of writing and dramatics for children. Teachers were given the opportunity to study laboratory methods in biology and the teaching of conservation. A number of institutes were sponsored by the School of Industrial and Labor Relations during the summer period.

The Session was characterized by a seriousness of purpose on the part of students and by a full and well-attended extra-curricular program. I wish to thank the members of the resident and visiting faculty and the administrative staff of the University for the fine cooperation which resulted in a successful summer program.

The attached tables will give specific details on comparative enrollments, classification of students, and distribution of student hours.

## PRESIDENT'S REPORT

## TOTAL ENROLLMENTS

	1939	1947	1948	1949	1950
Graduate and Special Students . . . . .	1462	1025	1224	1342	1356
Undergraduates . . . . .	600	1700	1520	975	634
Totals . . . . .	2062	2725	2744	2317	1990

## UNDERGRADUATE CLASSIFICATION

Cornell University . . . . .	318	1416 *	1229 †	743	473
Other Institutions . . . . .	282	284	291	232	161

## CLASSIFICATION OF TEACHERS ENROLLED

College and University . . . . .	105	117	113	154	141
Secondary School . . . . .	513	343	383	372	356
Elementary School . . . . .	73	48	55	72	93
Principals, Superintendents, Supervisors . . . . .	63	61	83	49	48
Others (teachers in institutes, Junior colleges, dietitians) . . . . .	157	83	59	68	62
Totals . . . . .	911	592	610	715	700

\* Includes 195 men enrolled in six-week post-session.

† Includes 167 men enrolled in six-week post-session.

## DISTRIBUTION OF CREDIT HOURS BY SCHOOLS

	1939	1948	1949	1950
University . . . . .	6169 (55.5%)	9132 (61.7%)	6977 (54.4%)	4667 (46.7%)
Agriculture . . . . .	3622 (32.6%)	3355 (22.6%)	3466 (27.1%)	3032 (30.3%)
Home Economics . . . . .	886 (8.0%)	1351 (9.2%)	1155 (9.0%)	1092 (10.9%)
Hotel Administration . . . . .	435 (3.9%)	396 (2.7%)	480 (3.7%)	532 (6.8%)
Industrial and Labor Relations . . . . .	...	555 (3.8%)	749 (5.8%)	674 (6.8%)

FREDERICK H. STUTZ  
Director of the Summer Session

## APPENDIX XXII

REPORT OF THE DIRECTOR OF THE DEPARTMENT OF  
MILITARY SCIENCE AND TACTICS

*To the President of the University:*

SIR: I have the honor to submit this report of the Department of Military Science and Tactics for the academic year 1950-51.

## GENERAL

As was to be expected, the impact of the Korean war was strongly felt by the Department of Military Science and Tactics. This was evidenced not only by a tripling of the enrollment in the first year of the Advanced Course, but also by a quickening of interest in the Basic Course students—students who, not having time to complete the entire course, still realized that some military training would be of benefit to them in the future.

The curriculum for both courses, Basic and Advanced, remained substantially the same as last year. First-year Basic students pursued a general branch immaterial course with the addition this year of a fifteen-hour sub-course in weapons and marksmanship. This course was well received by the students, due to its suitability under present conditions. During the spring term, freshmen were allowed to choose the branch of the service in which they would continue their studies next year, and, if they so elected, in the Advanced Course. These selections of branch were guided in the most part by the student's personal choice, modified necessarily by quota limitations established by the Department of the Army. All officers of the Military Department were available, and assisted the student in his choice to make it accord as far as possible with his future civilian career. This year's sophomores who had made this selection last year pursued studies allied to that branch in preparation for further development in the Advanced Course.

A special one-year course leading to a commission was opened in September for veterans with over one year's service who were either seniors or in the Graduate School. These students, of which there were twelve, are attending ROTC summer camp this summer and will be commissioned at the completion of the camp. It is not expected that this course will be repeated next year.

The Faculty Committee on Military Curricula met several times during the year, and a start was made on the equalizing of academic credit given by the different colleges and schools for participation in both Basic and Advanced ROTC. An agreement was reached with the School of Electrical Engineering regarding the granting of credit to Advanced Course students for courses pursued in that School. The New York State College of Veterinary Medicine this year granted credit for participation in the ROTC program.

A comprehensive survey was made of the facilities in Barton Hall and a long-range program has been introduced for the enlarging and modernization of these facilities. This program has been discussed with the University authorities, and it is expected that some of the work will be started this summer.

A study was made of personnel needs of the military department, other than those furnished by the Department of the Army. As a result of this study and with the concurrence of the Vice President for Business a rearrangement of duties has been made which will result in greater efficiency of operation.

Colonel Ralph Hospital retired from the Army on January 31, 1951, and from his post as professor of military science and tactics on the same day. He was succeeded as professor of military science and tactics by Colonel George S. Smith, Artillery.

## PRESIDENT'S REPORT

The annual inspection by representatives of the Department of the Army was held on May 17-18, 1951. The University received a satisfactory rating, which is the highest that is given at these inspections. A review was staged on May 17 in connection with the inspection and in observance of Armed Forces Day. The Navy ROTC and the Air Force ROTC also participated in the review. Local veterans' organizations joined in the awarding of medals and prizes.

The annual Presidential Review was held on Upper Alumni Field at 2:30 p.m., May 25. Awards at that time were made by Acting President Theodore P. Wright.

The enrollment for 1950-51 is shown in Table I. As a matter of interest, final enrollment for the year 1946-47 appears in parentheses.

TABLE I. BASIC COURSE.

	<i>Enrolled</i>	<i>Completed</i>	
First year . . . . .	1013	902	(482)
Second year . . . . .	687	632	(202)
TOTALS . . . . .	1700	1534	(684)

## ADVANCED COURSE

## First Year

	<i>Enrolled</i>	<i>Completed</i>	
Artillery . . . . .	130	128	(43)
Ordnance . . . . .	44	40	(13)
Quartermaster . . . . .	128	133*	(31)
Signal Corps . . . . .	26	26	(10)
Veterinary . . . . .	27	26	( 0)
TOTAL . . . . .	355	353	(97)

\* Includes late and midterm enrollees.

## Second Year

	<i>Enrolled</i>	<i>Completed</i>	
Artillery . . . . .	34	34	(15)
Ordnance . . . . .	19	18	( 2)
Quartermaster . . . . .	56	53	( 3)
Signal Corps . . . . .	9	8	( 0)
Veterinary . . . . .	26	26	( 0)
TOTAL . . . . .	144	139	(20)

One hundred and twenty-five students were presented commissions as Second Lieutenants, ORC, this year, and twenty-one students are due to receive their commissions on the completion of summer camp in July. Five students accepted commissions as Second Lieutenants in the Regular Army.

## FACULTY AND STAFF

Changes in the Army commissioned personnel during the year were as follows:

*Relieved:*

Captain Arthur G. Pinkham, S.C., August 1, 1950  
 Major Richard A. Shagrin, Arty., August 22, 1950  
 Major Donald B. Gordon, Arty., Oct. 27, 1950  
 Major Henry L. Seger, Ord., Dec. 14, 1950  
 Colonel Ralph Hospital, U.S.A., Retired, Jan. 31, 1951  
 Major Lawrence B. Clark, Arty., June 20, 1951



*Assigned:*

Major Donald B. Gordon, Arty., July 6, 1950  
Captain Myron H. Dakin, S.C., August 6, 1950  
Major Daniel T. Delaney, Q.M.C., August 10, 1950  
Captain Frank A. Dwyer, Q.M.C., August 15, 1950  
Colonel George S. Smith, Arty., Sept. 12, 1950  
Captain Alan C. McKittrick, Arty., Nov. 11, 1950  
First Lt. Robert M. Griswold, Arty., March 6, 1951  
Captain Charles D. O'Connor, Arty., April 11, 1951

## RECOMMENDATIONS

1. That the necessity for a uniform system of academic credit in all of the schools and colleges be recognized and that such a system be adopted.
2. That the immediate work and alterations to Barton Hall, as extracted from the long-range program submitted to R. M. Mueller, Superintendent of Buildings and Grounds, be accomplished as soon as possible.

GEORGE S. SMITH  
Colonel, Artillery,  
Professor of Military Science and Tactics

## APPENDIX XXIII

REPORT OF THE DIRECTOR OF THE DEPARTMENT OF  
NAVAL SCIENCE

*To the President of the University:*

SIR: I have the honor to submit this report of the Department of Naval Science for the academic year 1950-51.

## GENERAL

*Mission:* The mission of the Naval Reserve Officers' Training Corps is to provide by a permanent system of training and instruction in essential naval subjects at civil educational institutions a source from which qualified officers may be obtained for the Navy, the Marine Corps, the Naval Reserve, and the Marine Corps Reserve.

*Objectives:* The objectives of the Department of Naval Science in carrying out the above mission are:

1. To provide the student with a well-rounded course in basic naval subjects, which in conjunction with a baccalaureate degree, will qualify him for a commission in the United States Naval Service.
2. To develop an interest in the Naval Service and a knowledge of naval practice.
3. By precept, example, and instruction to develop the psychology and technique of leadership in order that the young officer may be able to inspire others to their best efforts.
4. To supplement the academic work of the school year by summer cruises, aviation-amphibious training, and/or Marine Corps encampments and/or civil engineering summer survey camps.
5. To provide certain students with such specific training, differentiated in the part of the course, as will qualify them for commissions in the United

States Marine Corps or the United States Navy (Civil Engineering Corps). Cornell University is not one of the institutions which provides specific Supply Corps training.

Entrance requirements and methods of selection are covered in other publications, particularly in the annual NROTC *Bulletin of Information* and Cornell University's *Announcement of the Independent Departments*. It appears pertinent, however, to differentiate briefly between the two types of NROTC students—Regular and Contract.

1. Regular students, midshipmen, USNR, are candidates for commissions in the Regular Navy and Marine Corps, who are obligated to make all summer cruises and to serve two years on active duty after commissioning, and who will receive the compensation and benefits provided for by Public Law 729, as amended. (Deferred under Selective Service Act.)

2. Contract students are candidates for commissions in the Navy or Naval Reserve, or in the Marine Corps or Marine Corps Reserve, who are not obligated to serve on active duty and who will receive only the compensation provided by previous existing legislation. (Deferred under Selective Service Act by agreement to serve two years on active duty after commissioning, if called by the Secretary of the Navy.)

It should be noted that, unlike the other military services, the NROTC program is not divided into basic and advanced courses as such. Any student entering the NROTC program ostensibly does so for the complete four-year curriculum and is deferred under the Selective Service Act during the entire undergraduate period, including one year in a leave status if taking a college course requiring five years.

#### ENROLLMENT

The enrollment in the NROTC in September, 1950, was 348, which represented a decided increase over the previous year when 284 were enrolled. This increase was due to an increase in quota assigned by the Bureau of Naval Personnel for the incoming freshman class. The total input in September, 1950, was 138—38 Regulars (including 10 former Contracts) and 100 new Contracts. It is of interest to note that the input for September, 1951, is to be 148—38 Regulars (including 10 former Contracts) and 110 new Contracts. This will result in a unit of about 400 students.

During the 1950-51 academic year NROTC students were enrolled in eleven colleges, schools, or departments of the University. Naturally, this necessitated many dealings between the Department of Naval Science and these other divisions, all of whom were, without exception, cooperative in every respect.

At the end of the current year, disenrollments of 51 students from the NROTC were completed or pending. The reasons and numbers are listed below:

Dropped by the University . . . . .	15
Academic deficiency (remained in University but failed to meet academic standards for retention in NROTC) . . . . .	17
Disciplinary (breaking nonmarriage agreement) . . . . .	2
Inaptitude for the Naval Service . . . . .	7
Physical disqualification . . . . .	6
Own request . . . . .	3
Appointment to the Naval Academy . . . . .	1
<hr/>	<hr/>
TOTAL . . . . .	51

Thirty-seven seniors were scheduled to graduate and to be commissioned on June 11, 1951. Of these, twenty-five were commissioned on Commencement Day in the U.S. Navy, U.S. Naval Reserve, or U.S. Marine Corps. Six were graduated and their commissions withheld pending satisfactory completion of navy cruise requirements during the summer of 1951. The remaining

six had fulfilled all Naval Science requirements but were not graduated because of academic deficiencies which had to be made up during the summer. Upon receipt of their degrees they will be commissioned. Those taking summer courses to complete their degree requirements were faced with a delay in receiving their commissions until confirmation of graduation in October, 1951. Through the good offices and cooperation of the dean of the Faculty, the dean of the College of Arts and Sciences, the secretary of Corporation and University counsel, the Board of Trustees, and the president of the University, arrangements were made whereby degrees are to be conferred on these six students in August, 1951. This will permit them to be commissioned soon after the termination of the summer session. This year all students, both Regular and Contract, were assigned to active duty upon being commissioned.

#### NAVAL SCIENCE CURRICULA

The four-year Naval Science program requires three hours of classroom work and a two-hour laboratory period each week. The subjects studied are of college level and are based on the normal academic standard of each hour of recitation requiring two hours of preparation. It is refreshing to note an abatement in the layman concept that laboratory or "drill" periods are devoted primarily to infantry exercises. NROTC laboratory periods are practical applications and demonstrations necessary to a proper comprehension of the subject matter studied. They are comparable in scope and purpose to laboratory periods in any other college or department of the University.

A brief description of the prescribed Naval Science courses follows:

*First year:* NS 101 and 102. Naval History and Orientation (includes history of sea power; organization of Navy and Department of Defense; leadership; seamanship; communications) (90 sessions).

*Second year:* NS 201 and 202. Naval Weapons (includes weapons, explosives; fire control; electronic equipment) (90 sessions).

*Third year:* NS 301 and 302. Navigation (includes piloting, theory and technique of surface navigation; meteorology; celestial observations; maneuvering board) (90 sessions).

NS 302M. History of the Art of War (includes study of land battles; campaigns; combat organization; military concepts) (45 sessions; for Marine candidates).

*Fourth year:* NS 401. Naval Machinery and Diesel Engines (study of naval engineering; main propulsion plants, steam and diesel) (45 sessions).

NS 402. Ship Stability, Naval Justice, and Leadership (includes damage control; buoyancy; Uniform Code of Military Justice; psychology of leadership) (45 sessions).

NS 401M. American Military History and Policy (development of U.S. military policy; tactics; concepts of military power) (45 sessions; for Marine candidates).

NS 402M. Amphibious Warfare (history and principles of amphibious warfare; study of selected battles) (45 sessions; for Marine candidates).

Next year's curricula will contain some revisions of the above.

Credit hours granted to Naval Science courses are not the same in all colleges and schools of the University. The overload due to Naval Science varies from 0 to 18 hours. In some of the engineering schools the overload is partially reduced because certain courses in the schools are considered the equivalent of NS 401 or vice versa. Also certain practice requirements in the College of Agriculture, the School of Civil Engineering, the School of Mechanical Engineering, and the School of Hotel Administration are the subject of special arrangements with respect to Naval Science. During the past year the Committee on Military Curricula has been studying the existing credit system, and it is felt that progress has been made in developing an appreciation of the value and merit of the Naval Science courses. The overload due

to Naval Science is a matter of considerable concern to the committee, although the wholehearted cooperation given by other divisions of the University is refreshing and reassuring.

#### FACILITIES

All of the facilities presently available to the NROTC are on a *temporary* basis. These comprise the following:

*NROTC Headquarters*, 3 East Avenue: Contains offices, storerooms, vaults, one classroom, and miscellaneous spaces. This building is due to be razed in about two years to make room for a permanent structure for the College of Engineering.

*Naval Gunshed*, on Campus Road, between Diesel Laboratory and School of Industrial and Labor Relations: Contains ordnance equipment, training gear, models, workshop, ordnance library, one classroom, and limited assembly space; also serves as storage for USN vehicle. This building is apparently not due for early demolition but long-range plans should include replacement.

*Olin Hall*: Through the kindness and understanding of the director of the School of Chemical and Metallurgical Engineering six rooms were made available to the NROTC in Olin Hall. Three were used as classrooms and three smaller ones as storage for books, training aids, and navigation equipment. This arrangement has proved satisfactory, but need for these rooms by the School of Chemical and Metallurgical Engineering might arise, with the result that Naval Science would be without more than half the required classroom facilities and a considerable proportion of storage space.

In view of the temporary nature of all the facilities now available and the increased NROTC enrollment, it is highly important that provision be made to furnish the facilities required before those currently in use are lost. At one time the northeast corner of the intersection of Campus Road and East Avenue was approved as a site for a Naval Science building. Another concept has been to build an addition to Barton Hall in which the NROTC would be furnished all of the required facilities. From the standpoint of long-range planning, the objective should be to provide all the requirements in one structure in the general vicinity of the present location. To date, no plans have reached the implementing stage although the problem is again under review.

#### STAFF

The Department of Naval Science started the 1950-51 academic year with eight officers, four of whom were recent arrivals. During October, 1950, the second senior officer was detached unexpectedly to a sea assignment. Another officer reported to the unit in November. Three officers were detached in June, 1951; replacements will not report until August or September. All officers except the professor of naval science have been assigned to temporary duty away from Ithaca during varying portions of June, July, August, and September, in connection with summer training of NROTC students.

There were no permanent changes during the past year among the seven enlisted members of the NROTC staff. One chief storekeeper was ordered to temporary additional duty from May 24 to September 15, at Norfolk, Va., in connection with summer training. One chief quartermaster was ordered to temporary additional duty at sea for a period of about three weeks.

In addition to instruction duties, all officers have various other administrative duties of a primary or collateral nature. During the past year the professor of naval science served on several Faculty committees—the Military Service Committee and the Committee on Military Curricula. Attendance was also provided at meetings of other Faculty committees when matters germane to the Navy were discussed. The Committee on Student Conduct has investigated procedures for handling, from the University standpoint, disciplinary cases, especially those involving breach of contract. A representative of the

professor of naval science has served on the Committee on Registration and Schedules.

It is considered that the present staff is the minimum size capable of meeting effectively the mission of the NROTC at Cornell.

#### JOINT EXERCISES AND ACTIVITIES

The NROTC participated with the Army and Air Force ROTC in two military reviews. The first review was on May 17, 1951, in connection with Armed Forces Day. The second was the annual Presidential Review on May 25, 1951.

On the evening of April 14, 1951, a joint military ball was held at the Statler Club. This was an unofficial activity organized by the students of all services.

It should be noted that the terms "Military," "Military Training," and "Military Science" are frequently used in a collective sense to embrace all the armed services and their respective ROTC programs.

#### EXTRACURRICULAR ACTIVITIES

The Eagle and Anchor Society is a midshipmen's club which sponsors various social activities, sports, and the NROTC campus paper, *The Derelict*. It is open to all students enrolled in the NROTC program.

The NROTC Unit entered teams in most intramural sport competitions.

NROTC students participated in Scabbard and Blade and in the Pershing Rifles.

#### RECOMMENDATIONS

The following recommendations are submitted:

1. That definite provision be made to confer degrees soon after the summer session on NROTC students who require a final summer session to meet graduation requirements, in order to minimize the delay in commissioning these students.

2. That study of the credit hours assigned to Naval Science be continued.

3. (a) That definite provision be made to furnish the required facilities to the Department of Naval Science by the summer of 1953 (the estimated time when work is scheduled to start on a new project in the vicinity of the present NROTC headquarters building); and (b) That the long-range plan to provide adequate facilities for the Department of Naval Science be concluded and implemented.

F. S. HABECKER  
Captain, U.S. Navy,  
Professor of Naval Science



## APPENDIX XXIV

REPORT OF THE DIRECTOR OF THE DEPARTMENT OF  
AIR SCIENCE AND TACTICS

*To the President of the University:*

SIR: I have the honor to submit this report of the Department of Air Science and Tactics for the academic year of 1950-51.

## GENERAL

The impact of the Korean War reflected in the student enrollment figures the degree of student interest in the subject matter of courses offered. Student interest increased to a commendable level, and advanced course enrollments substantially exceed planning estimates.

<i>Level</i>	<i>Estimated</i>	<i>Actual</i>
First Year Advanced Course . . . . .	86	165
Second Year Advanced Course . . . . .	66	152

One hundred and twenty-three of the Second Year Advanced Course students were commissioned in June 1951 as Second Lieutenants, United States Air Force Reserve, contrasted with thirty-nine for 1949-50.

This department has two missions. The first is concerned with laying the foundations of intelligent citizenship and giving the student such basic military training as will be of benefit to him and to the military service if he becomes a member thereof. The second is concerned with the production of junior officers who have the qualities and attributes essential to their progressive and continued development as officers of the United States Air Force. The annual reexamination of these missions with respect to developments at home and abroad indicated no need for changes. Curricula changes mentioned in the following paragraph support the aforementioned missions.

The curricula for the Advanced courses remained substantially the same as last year. The Basic course, however, was modified in the direction of reducing its diversified nature. Class hours were increased in the case of fundamental sub-courses in consequence of the elimination of certain specialized sub-courses. Plans for the 1951-52 school year indicate a continuation of this trend, e.g., the sixty academic hours for the First Year Basic Course will be devoted to a comprehensive course in world political geography.

In September 1950, an opportunity was offered to qualified engineering seniors and engineering graduate students to enroll with regular senior students in the second year of the advanced course, Communications specialty, in order to qualify for a commission on graduation in June 1951. Twelve students applied and seven were accepted and enrolled.

In January 1951, this opportunity was offered to qualified engineering students who had one term remaining in the University before receiving a degree. More than fifty applied. Twenty-four were accepted and enrolled in the Communications specialty. In February, the same opportunity was offered to non-engineering students and graduate students. About one hundred applied and forty-five were accepted and enrolled in the Administration and Logistics specialty.

The above special curtailed programs were on a one-time basis only, and it is not contemplated that similar programs will be offered in the future. The majority of the graduates of these curtailed courses were ordered into active

military service following graduation from the University and receipt of commission.

Within the limits of quota allotments assigned, this Department offered draft deferments to Cornell students as follows:

First year Basic students . . . . .	410
Second year Basic students . . . . .	247
First year Advanced students . . . . .	165
Second year Advanced students . . . . .	145
Other students in the University pending enrollment in the Advanced course . . . . .	45

The Faculty Committee on Military Curricula met several times during the year. The subject of uniform and adequate academic credit for participation in Advanced and Basic ROTC, which was mentioned in this report last year, was accepted for active consideration by this committee.

An agreement was reached with the School of Electrical Engineering whereby advanced course AF ROTC communications students will be granted credit for such courses as are required by one and offered by the other, this agreement to be effective under such circumstances as will preclude a student's duplicating courses.

This Department's interests were considered in the survey of Barton Hall facilities and long-range facilities development program referred to in the *General* section of the "Report of the Director of Military Science and Tactics."

The Annual Federal Inspection by representatives of the First Air Force was held on the 17th and 18th of May 1951. This department received the highest authorized rating.

The Annual Inspection Parade and Review was held May 17, 1951 on Upper Alumni Field. As this parade and review constituted the University's official observance of Armed Forces Day, it was conducted on a joint basis with the Army and Navy ROTC units. More than 3,000 students participated. Local veterans' organizations joined in the awarding of medals and prizes.

Students and supervisory personnel of this Department participated in the annual Presidential Review on Upper Alumni Field May 25, 1951. Air Force Cadet Colonel William R. Hamilton was in command of this three-services joint operation. Acting President Theodore P. Wright, the honor guest, presented awards to outstanding ROTC students.

#### BASIC COURSE

The Basic Course is given to all male students for their first two years as required by University regulations.

In conformance with the changes in military training practices of the Department of the Air Force, this Department replaced twelve hours of rifle drill and instruction with a like number of hours devoted to the further development of military courtesy, customs of the service, and individual responsibilities in group endeavor situations.

The first year of the 1950-51 Basic Course was the same as offered during 1949-50.\*

The second year of the Basic course contained the modifications mentioned in the *General* section of this report. The thirty hours of pre-advanced course specialization instruction during the second semester of the second year of the Basic course was discontinued. This thirty hours of instruction was devoted to the theory of applied airpower in order to improve the student's appreciation of the role assigned the Air Force in the national security sphere.

\* Report of the President, Cornell University, 1949-50, Page 173.

## PRESIDENT'S REPORT

## ADVANCED COURSE

The specialties established at Cornell University for Air Force ROTC advanced course instruction were: administration and logistics, communications, armament,<sup>†</sup> and flight operations.<sup>†</sup>

The objective of these courses is to produce college-trained regular and reserve officers qualified in one of the above mentioned specialties. To a great extent a student's assignment to a specialty depends on his academic major.

## ENROLLMENT 1950-51

*Basic Course*

	<i>Enrolled</i>	<i>Completed</i>
1st Year . . . . .	479	439
2nd Year . . . . .	309	299
Totals . . . . .	788	738

*Advanced Course*

Administration and Logistics . . . . .	95	95
Communications . . . . .	71	70
Totals . . . . .	166	165

*2nd Year*

Administration and Logistics . . . . .	100	99
Communications . . . . .	54	53
Totals . . . . .	154	152 *

\* The discrepancy between this figure and the number commissioned is due to twenty-nine students not being eligible for the baccalaureate degree and therefore, ineligible for commissioning until such time as the degree is conferred, e.g., five-year engineering students who complete the Advanced course in their fourth year of college.

## FACULTY AND STAFF

Changes in Air Force personnel during the year were as follows:

*Relieved* (as of July 31, 1951):

CWO Ralph T. Mahoney . . . . .	June 1951
M/Sgt. Francis J. Gleason . . . . .	June 1951
T/Sgt. Stanley P. Frankewich . . . . .	June 1951

*Assigned:*

Major Nathan Weiner . . . . .	May 1951
Major Belvie R. Lowrance . . . . .	December 1950
CWO Ralph T. Mahoney . . . . .	January 1951
M/Sgt. Joseph A. Connolly . . . . .	December 1950
M/Sgt. Samuel J. Donald . . . . .	January 1951
M/Sgt. Kenneth W. Moyer . . . . .	July 1951
T/Sgt. John E. Callahan . . . . .	July 1951
T/Sgt. William Gill . . . . .	July 1951
S/Sgt. Donald A. Minnie . . . . .	January 1951

## RECOMMENDATIONS

1. That the necessity for a uniform system of academic credit in all the schools and colleges be recognized and that such a system be adopted.
2. That the immediate work and alterations to Barton Hall, as extracted from the long-range program submitted to Mr. R. M. Mueller, Superintendent of Buildings and Grounds, be accomplished as soon as possible.

GEORGE T. CROWELL

Colonel, USAF, Professor of Air Science and Tactics

<sup>†</sup> To be offered for the first time in 1951-52.

## APPENDIX XXV

REPORT OF THE DIRECTOR OF PHYSICAL EDUCATION  
AND ATHLETICS

*To the President of the University:*

SIR: It is a real pleasure to make this initial report to you such a satisfactory one.

The Division of Intercollegiate Athletics reports a balance of \$15,310.52 for its 1950-51 operations. The fact that the football team under Coach George K. James was able to maintain its standard of excellence of the previous four years under him has been responsible for this unusually high income. High income is necessary these days because the cost of conducting an intercollegiate athletic program has become excessively expensive, and I would judge that Cornell is one of a very small number of schools supporting a comprehensive sports program in the year 1950-51 able to report a surplus. Expenses were \$424,420.58, income \$439,731.10, and the surplus is applied toward the department's indebtedness to the University, thus reducing it to \$42,976.83.

The track team won the only championship. It won the outdoor Heptagonal Games and Intercollegiate title and was second in National Collegiate championship. Charles Moore was National AAU champion in the 400-meter hurdles, was National Collegiate champion in the 220 low hurdles; Meredith Gourdine was Intercollegiate champion in the 220 low hurdles and won the broad jump with a record performance, 25 feet, 9¾ inches; Robert Mealey won the 880 yards in the Intercollegiates and Walter Ashbaugh, the 120 high hurdles.

In other sports the teams performed well. Frank Bettucci won the Intercollegiate 147-pound wrestling championship. Captain Robert F. Haley was the leading base stealer in the Eastern Intercollegiate Baseball League.

Before leaving the intercollegiate phase of the department's responsibilities, I wish to refer to the various depredations which have come to light in basketball and football in collegiate circles in this country. Cornell does not have athletic scholarships and does not admit people to school who do not qualify and therefore escapes some of these problems. We are fortunate, too, in being removed from large metropolitan centers where gambling has taken its toll of intercollegiate athletics. But this is a most propitious time for us to examine our conscience to determine whether we are pursuing the high moral policies and philosophies which have distinguished Cornell's athletics from the beginning. I feel sure we are, but self-examination would be helpful at this particular juncture in Cornell history.

There is evidence pointing to a bright new era for physical education. It is expected that the new men's gymnasium, a gift of Walter C. Teagle '99, will become a reality before this next academic year is over. Also, the Moakley recreational center seems to be an imminent new possibility on the campus horizon. These two additions will be welcome adjuncts to an inadequately equipped division, especially for the men. The women will benefit some from the Moakley House and by the fact that the men will give way on certain other facilities, but they still have too few facilities of their own.

As pointed out for many years past in these reports, the methods of financing the physical education programs are unbusinesslike and distinctly unfair to the intercollegiate division. It is urged that the financing of physical education be examined and revised before the new men's gymnasium is built and has to be maintained by the presently employed methods.

In both men's and women's divisions of physical education, there are inadequate and therefore overworked staffs which are underpaid. Despite this they are performing good work under the direction of Miss Bateman and Mr.

Wilson. It is respectfully requested, therefore, that this be kept in mind if and when examination of the methods of financing is undertaken.

The intramural programs continue to attract large numbers of participants.

During the summer the steel stands on Schoellkopf field will be painted. An expected addition to the press box will provide four new booths for radio and television. Schoellkopf Hall will be painted outside and will get some inside repairs. There are the usual other small items of construction and repairs which, when added together, comprise substantial items and explain in part the reason why the cost of running this department has more than doubled in the past ten years.

Viewing the operation for the future, it is expected that the department will continue to support itself and accomplish its functions successfully and in keeping with its place in the University curriculum.

ROBERT J. KANE  
Director of Athletics

## APPENDIX XXVI

### REPORT OF THE CHAIRMAN OF THE DEPARTMENT OF CLINICAL AND PREVENTIVE MEDICINE

*To the President of the University:*

SIR: I have the honor to present the report of the Department of Clinical and Preventive Medicine for the year 1950-51.

In the report of last year, consideration was given to the idea of consolidating the Clinic with the Infirmary at the latter location. The entire plan, including the attitude of the medical staff, students, and Faculty was reported in detail. Last fall when the physical plant of the Infirmary was examined more closely by consulting architects, there arose doubts as to the feasibility of the move because of the large estimated expenditure which would be required. This factor plus the fact that eventually the consolidated location should be on or near campus, rather than a mile away, resulted in the indefinite deferment of the plan. Another reason supporting deferment was the appointment of a committee to investigate community hospital needs by the Board of Supervisors of Tompkins County. It was believed that the committee would recommend either a new hospital or major additions to the present community hospital. Such a program, if it developed, would offer an alternative plan to that of Infirmary-Clinic consolidation. The erection of a modern clinic on campus then would be feasible, and the University could contract for a specific number of beds for student patient use in the community hospital. The abrupt rise in overhead costs for relatively few patients may reach a figure so high that it will no longer be defensible to operate a student hospital alone.

To date the committee appointed by the Board of Supervisors to investigate community hospital needs has not reported. The committee's attention has been called to the fact that if Cornell contracted for beds, overhead costs now being paid to maintain an Infirmary could be used to support overhead at a community hospital.

In previous years, the work of this department was discussed under the headings of clinical duties, preventive medicine and public health, research and instruction. For comparative purposes it seems appropriate to follow this formula in the present report.



## CLINICAL DUTIES

*Student Medical Clinic.* The policy of the Clinic during the year continued unchanged. With the decision not to consolidate the Infirmary and Clinic at the Infirmary, maintenance problems arose as did need of physical changes to accommodate personnel.

This year there seemed to be more than usual student interest in the Clinic. Perhaps this was brought about in part by the interest created last year in discussions relative to the removal of the Clinic to the Infirmary and in part by the strong public-relations policy developed during the last few years. This year more orientation tours of both the Clinic and the Infirmary were undertaken for groups of students in training for student counselorship and for leaders in student affairs. Each of these occasions was followed by a question-and-answer period which always appeared to result in stimulation of a new or dormant student interest in their medical department. It seems well established that the annual program of informing students about health facilities through their leaders is productive of better rapport between students and physicians.

At the Clinic a major change in personnel was the retirement of Dr. Harry Britton from the role of athletic physician and the assumption of those duties by his successor, Dr. Alexius Rachun. It was of great advantage to the Clinic in general and Dr. Rachun in particular to have Dr. Britton continue working in the Clinic in a part-time capacity during the year.

*Mental Hygiene.* The Mental Hygiene Clinic continues to be most active. This year Dr. Temple Burling severed his official connection with the medical department when he assumed a full-time role in the School of Industrial and Labor Relations. However, Dr. Burling continued to treat patients from the Clinic during the year. Also Dr. John Butler, fellow in industrial psychiatry, under the supervision of Dr. Darling, carried a few patients. This year the community (county) established a Mental Hygiene Clinic with Dr. Hayden Rochester in charge. The community project absorbed one half of Dr. Rochester's time. He gave ten hours each week to the Student Medical Clinic; his remaining time was devoted to private practice in the community. In addition to remuneration for the services he rendered the Student Medical Clinic, Dr. Rochester was given the privilege of treating patients, referred to him from community physicians, at his office in the Clinic.

There were eleven medical leaves of absence recommended for mental hygiene reasons this year. Four of these were patients with psychosis, all males. Families in each instance were helped with arrangements for hospitalization.

The chart of each entering student was examined for evidence of nervous symptoms. If there was an indication of symptoms, that student was interviewed by the health counselor. Seventy-two men and sixty-one women were thus interviewed early because of nervous symptoms in the history. Of these, sixty-one men and forty women were not followed after one interview; however, eleven men and twenty-one women were referred to psychiatrists from this group. The health counselor also interviewed seventy-one men and ninety-one women from classes other than the freshman class. These students came to her voluntarily or were referred to her by other nonmedical persons. The number of students interviewed, both men and women (295), and the total number of interviews (541) during the 1950-51 period represent a considerable increase over last year.

Dr. Darling remarks that "this coming year, for the first time, we will have a full Clinic team consisting of psychiatrists, a social worker, and a clinical psychologist." The completion of the team was made possible through the generosity of an anonymous donor who is interested in contributing to the stability of students. This gift obtained by former Acting President Cornelis de Kiewiet was designated by him for the employment of a clinical psychologist for an experimental period of three years. Fortunately a young man who recently finished his graduate work in clinical psychology accepted the position for the three-year term. Dr. Darling concludes, "No one can foresee what changes may come in the general mental health of students on this campus during the

next few years. I believe, however, if the present Clinic staff can be held together, we are in position both from the standpoint of experience and from the standpoint of trained personnel to cope with the emergencies that may arise. Further efforts, however, in expanding the work of mental hygiene in education can be carried out only with an increased mental hygiene staff."

COMPARATIVE CLINICAL PSYCHIATRIC TABLE

	Total No. Cases	Old	New	Men	Women	Veterans	Leaves of Absence
1944-45.....	142	16	126	85	57	..	20
1945-46.....	208	23	185	132	76	66 *	19
1946-47.....	175	34	141	105	70	79	11
1947-48.....	200	48	152	141	59	70	25
1948-49.....	206	44	162	153	53	111	24
1949-50.....	245	52	193	167	78	74	9
1950-51.....	205	51	154	147	58	40	11

\* Active service men and veterans.

*Physiotherapy.* The physiotherapy department of the Clinic continues to be active. Because of the greater accessibility of the Clinic to student athletes who have become injured in athletic activity, a total of 536 treatments on athletes were given in the physiotherapy department. The over-all total was slightly less than last year. During the year the Federal Communications Commission advised that by July 1, 1952, all short-wave equipment must be replaced by equipment approved by the Commission. The Clinic will comply fully with the federal order by that time.

*Medical Leaves of Absence.* All medical leaves of absence are recorded at the Student Medical Clinic. With the exception of Dr. Darling, no one physician issued more than four medical leaves of absence during the year. The total, however, was slightly more than last year—30 compared to 24 the previous year. This department finds improved cooperation with the Faculty regarding readmission of students who have been given medical leaves of absence. This attitude is reassuring because, as formerly demonstrated, often the student's health status was not thoroughly reviewed before readmission and a second leave became necessary. The recommendation of the medical department that a student who has been issued a medical leave of absence be approved by the medical department before readmission is gradually gaining the support of the Faculty.

*Infirmery.* At the Infirmery more work on the backlog of maintenance was continued. The Sage House, which had received no major repairs on the outside in many years, had its exterior brought into first-class condition. When the decision was made to defer the combining of the Clinic with the Infirmery, a large amount of maintenance work which had been deferred until the time of the major alteration could no longer be postponed. Therefore, much replacement was undertaken at considerable expense, namely, replacement of the elevator, floor coverings in the kitchen, main hall, reception, and X-ray rooms.

This year, patient admissions, character of illness, medical and nursing care were practically of the same order as in other postwar years. A mild influenza flurry occurred in March and April caused by Influenza A virus. It was not of epidemic proportion.

An important innovation for the preservation of medical records was begun during the year. The department purchased a microfilm machine and a viewer. Persons on annual appointment and whose regular duties are light during the summer now assist with the assembling and microfilming of records. When the backlog of charts accumulating since 1940 has been microfilmed, the record of each year's graduating class can be microfilmed during the following sum-

mer. The machine will be available to other departments of the University whose needs for preservation of records are comparable to ours.

The Infirmary continues to be approved by the American College of Surgeons, and the Residency in Internal Medicine in conjunction with Memorial Hospital is certified by the American Board of Internal Medicine and the Council on Hospitals and Medical Education of the American Medical Association.

Statistics for the Infirmary and Clinic are given in Table I.

TABLE I. STATISTICS.

<i>Out-Patients</i>	
Medical Clinic out-patient visits . . . . .	45,021
Infirmary out-patient visits . . . . .	1,543
	<hr/>
	46,564
<i>Infirmary Patients</i>	
Medical patients discharged . . . . .	1,330
Communicable disease . . . . .	59
Other than communicable disease . . . . .	1,271
Number of consultations . . . . .	38
Deaths . . . . .	0
Surgical patients discharged . . . . .	279
Major operations . . . . .	37
Minor operations . . . . .	201
Fractures revealed by X-ray . . . . .	132
Fractures treated at Infirmary requiring casts . . . . .	69
Fractures treated at Clinic requiring casts . . . . .	37
Fractures not requiring casts . . . . .	35
Casts applied—no fracture . . . . .	6
Surgical specimens examined by pathologist . . . . .	148
Consultations . . . . .	96
Deaths . . . . .	0
Number of hospital days (medical and surgical) . . . . .	5,980
Average number patients per day . . . . .	21.01
Average length of stay (days) . . . . .	3.7
Leaves of absence (medical) . . . . .	30
Dental (Clinic and Infirmary)	
Number of patients . . . . .	2,261
	<hr/>
TOTAL NUMBER OF TREATMENTS . . . . .	2,530
<i>Eye clinic</i>	
Total refractions . . . . .	380
Total consultations . . . . .	118
<i>Physiotherapy (Clinic and Infirmary)</i>	
Diathermy treatments . . . . .	1,770
Infrared treatments . . . . .	780
Whirlpool treatments . . . . .	703
Baker treatments . . . . .	142
Ultraviolet treatments . . . . .	485
	<hr/>
TOTAL NUMBER OF TREATMENTS . . . . .	3,880
<i>Laboratory (Clinic and Infirmary)</i>	
Clinical pathology examinations made . . . . .	12,264

## PRESIDENT'S REPORT

TABLE I. STATISTICS. (CONT.)

X-ray (Clinic and Infirmary)	
Examination of chest (70 mm.)	5,510
Examination of chest (14 x 17)	1,584
Dental examinations	875
Examinations other than chest or dental	1,538
TOTAL X-RAY EXAMINATIONS	9,507

## PREVENTIVE MEDICINE AND PUBLIC HEALTH

In the 1949-50 report of this Department, a detailed account of the change in the manner of conducting the entrance physical examination was given. At that time it was stated that 92 per cent of the data obtained from physical examinations is negative data, the gathering of which is wasteful of medical talent. However, it was felt that before college entrance there must be on file an adequate personal individual medical history and an objective record of physical defect. Last fall Cornell abandoned its traditional entering physical examination. Special history forms were sent to the entering student. These were filled out by him at home and were taken to the family physician, who made the physical examination and recorded his findings on the Cornell University form. The completed history and physical examination were returned to the University medical department. All charts were studied during the summer, and appointments were made for Clinic visits during the first days of college for those students whose charts indicated physical defect. Appropriate adjustments in physical training and military drill were completed. Also, at this time, arrangements for future clinical follow-ups, where conditions warranted, were made. Last fall 3,228 new students came to the University. Nine remained but one week. Seven hundred sixty-three of these were graduate students and were exempted from a physical examination. Twenty-four hundred and fifty-six required a physical examination; of these 2,403 had their physical examinations made before entering. Fifty-one individuals required examinations in Ithaca; they were mostly foreign students who had not been sent examination blanks. These students were given the choice of having an Ithaca physician, or a physician of their choice elsewhere, make the examination or of having it made by the Cornell medical staff for a fee of five dollars. It was felt that students who had completed the examination at home by their private physician at expense to themselves should not feel penalized as might happen if foreign students were examined free of charge. At year's end all examinations were completed except two. All entering students have had a chest X-ray, an orthorator test for vision, and an audiometer test for hearing. At the present time among the total number of entering students only fourteen are delinquent in the tetanus toxoid requirement. Unless special arrangement has been made for these fourteen delinquents and the two students minus a physical examination by registration day in the fall, they will not be allowed to register. Of the total number of undergraduates, 99.7 per cent are immunized to tetanus and 100 per cent have a chest X-ray on file.

The decision to change the formula of entering examinations which would eliminate the requirement for graduate students proved to be a wise one. Also, the discovery that health requirements were not published in the various college Announcements and correction of this omission contributed to improved student attitudes. Misunderstanding of health requirements at the Clinic which previously had led, on occasion, to hostile feelings were completely absent this year.

Last autumn physicians of the University staff spent the first three or four days of college re-examining those students who had known deficiencies as reported on the chart forwarded by the student's private physician. Mention has been made that an individual who indicated nervous or emotional symptoms on the history form was interviewed by the health counselor and a decision made by her whether or not the student needed further follow-up treat-

ment. If the decision were positive, treatment was started according to the urgency of the indication. This policy brings heavy burdens to the Mental Hygiene Clinic early in the year. It seems probable that the supplementary examination, given on arrival here, of vision, hearing, and chest X-ray and the interviewing of those students indicating emotional instability could contribute to the prevention of academic failures. The new formula for physical examination has opened the door for research in vision and its relation to academic work; for research in hearing and its relationship to scholarship; also it allows interception of many physical and emotional situations which might otherwise lead to maladjustments during the early days of college. All told, the staff decision to change the formula of the entering examination seems vindicated. It has stood the test of one full year of operation and appears to have come through the test with flying colors. From the correspondence received referable to the manner with which examinations are now conducted, one must conclude that the Cornell experiment is receiving wide attention among other university medical departments.

There have been no outbreaks of food contamination in the dining halls of the University. Milk and water supplies have met official sanitary standards as have all units serving food. As in previous years since the establishment of the County Health Department, inspections have been made by the sanitary inspectors and sanitary engineer of that department. Recommendations for improvement in sanitation or sanitary principles have been made directly to the manager of residential halls.

Last year mention was made of dispensing machines for the marketing of milk. At the time of the annual report for 1949-50, these machines had just appeared on the upper campus. During the year the dispensing of milk in machines has been found to be a highly effective method of increasing the consumption of milk among students. Aside from needed technical improvements learned from the year's experimentation, it is of interest to note that 100,000 units of milk, a good source of vitamins, protein, and calcium, have been consumed by the student population of the University, in addition to milk ordinarily consumed at mealtime in the various dining halls and cafeterias of the University.

#### RESEARCH

This year, as in other years, some research has come to a conclusion. Other interesting investigations have been initiated, and still other research activities, begun previously, were continued. Joint research programs with other departments continue to lend unusual opportunity for diversification of investigation. The close association of this department with the School of Nutrition deserves renewed emphasis each year. Having available not only the advantages of the physical laboratories, but, in addition, increasing attitudes of cooperation among biochemists, physiologists, and nutritionists gives more scope to the research program.

This year much research was on a joint basis with the School of Nutrition. Members of our staff who had participated in the Groton survey completed the medical report which was published with the complete report of the survey during the year. Editorials on nutrition, in the preparation of which our staff participates, continue to appear monthly in the *New York State Journal of Medicine*. Members of the department participated in the programs of several meetings, namely, the Medical Society of the State of New York, the American College Health Association, the Dietetic Associations of New York State and Connecticut, the Institute for Mental Hygiene, the Oswego County Tuberculosis and Health Association, the White House Conference for Children and Youth, the Committee on Mental Hygiene of the State Charities Aid Association, and the State Department of Health's teaching program, "Mental Health in Public Health." A member of the department also served as a delegate from New York State to the 1951 meeting of the American Medical Association.



Resident physician studies on mononucleosis continued this year; the effects of cortisone and ACTH on the lymph structure in this disease and the effects on its clinical course were observed. Further observations on the inefficiency or inactivity of the antihistamines upon the common cold were published. Further data on the titer present in those having received tetanus toxoid at various intervals of time were obtained, and experimental observations on a new antigen for the determination of the Schick test for diphtheria-sensitive individuals was made.

During the year the department published a report, "Student Health and the Changing Order," in which a short history of the development of the Cornell medical services was given together with Cornell's interpretation of the role student medicine can play in the larger scheme of clinical medicine. These newer concepts, originating through experimentation and research at Cornell, are being widely discussed among those interested in the health of students.

As the year came to a close the staff voted to launch a small publication on a semiannual basis. The function of this journal will be to voice the philosophy of Cornell student medicine and to be a place of record for incompleting research reports conducted by resident physicians and staff members. Here important observations can be recorded until sufficient data have accumulated to warrant full reports in a national publication. The first articles for this journal are in manuscript form. The layout has been studied; the first edition will appear in the fall.

#### INSTRUCTION

The courses in medical nutrition and the courses in X-ray physics for Veterinary College juniors were continued during the year. Mental hygiene was taught during the summer session only, when teachers and others requiring mental hygiene may satisfy course requirements in that field. Because of heavy clinical commitments, the summer session is the only period of time that Dr. Darling can contribute to course teaching of mental hygiene.

It is probable that with groups of students coming to the Infirmary for informational tours and discussion periods regarding health, there will evolve an interest among undergraduates in informal, seminar-type discussions of health on a noncredit basis. During conferences this year with various groups, the question was frequently raised, "Would a formal course in health from various points of view be successful?" The answer was consistently "No." The feeling was expressed, however, that it would be desirable from the student's point of view if seminar-type health conferences were available on campus. It was predicted that informal discussions on health would be well attended and would create more interest than a formal course for credit. It may be interesting in the future to design more experimental meetings of this nature in order to clarify what direction health instruction should take.

The department, as of this date, continues to have responsibility for the resident-physician program in internal medicine. How negotiations, currently being instigated by the medical staff and board of managers of Memorial Hospital, will affect the resident-training program is speculative at this time.

#### FINANCES

On June 30, the Infirmary and Clinic account had a credit balance of \$17,459.79, which was credited to the Infirmary Repair Reserve. A more realistic picture, however, would be obtained by subtracting \$13,397.00 maintenance and replacement expense for work and equipment ordered as a charge against the 1950-51 budget, bills for which were unpaid when the books were closed. When allowance is made for payment of these charges, the free balance for the 1950-51 year of operation is \$4,062.79.

NORMAN S. MOORE, M.D.

Head of the Department of Clinical and Preventive Medicine

## APPENDIX XXVII

## REPORT OF THE DIRECTOR OF ADMISSIONS

*To the President of the University:*

SIR: I have the honor to present to you this report of the Director of Admissions for the year 1950-51. As usual, this report involves both a discussion of the activity of the office during the year 1950-51, and the results of the work of the previous year in terms of actual admissions in the fall of 1950 and spring of 1951.

## PUBLIC AND SECONDARY SCHOOL RELATIONS

Cornell University is unique in the variety of its educational offerings. There are thirteen different undergraduate curricula available, admission to which clears through the Office of Admissions. These thirteen curricula are under the jurisdiction of eight separate and autonomous educational divisions of the University. The University Faculty is responsible for establishing minimum acceptable standards as to quality and content of the secondary school record and the acceptability for entrance of specific subjects. Each of the eight colleges or schools sets its own requirements in terms of subject matter needed for entrance, and has its own standards for entrance involving quality of secondary school work over and above the University minimum, pattern of vocational interest, work experience, personal characteristics, etc., which go to make a good candidate. It therefore becomes a primary responsibility of the Office of Admissions to keep secondary schools, their students, and their students' parents well informed as to our educational offerings and the various hurdles involved in admission to any specific course or division. The University suffers on many occasions in its dealings with the admission-seeking public because of the lack of understanding by that public of the fact that an applicant is not an applicant to Cornell University, but to a particular division thereof, with standards and application pressures different than those in each other division.

Aside from the delicate but routine work involved in the actual processing of each application, the major effort of the Admissions Office is therefore of a public relations nature. Each year the office is in direct contact with some 55,000 persons—applicants, their parents, their sponsors, and their schools—without mentioning the neighbors next door, and the many interested friends of each applicant and his parents. Each of these persons should understand in so far as possible why we do what we do. The most direct approach to this vast "public" is through the secondary schools from which our life blood flows and which, if they understand, will interpret fairly our objectives and actions. So our primary target is the secondary school.

Our work with the schools includes a program of travel to visit each year secondary schools over as wide an area as possible, appearance upon invitation at a large number of "college choosing" programs sponsored by P.T.A. groups, schools, or groups of schools, an annual admissions conference which brings to the campus a group of principals and headmasters, and Cornell Day for secondary school juniors.

This year, campus representatives of the Admissions Office attended twenty-five "College Choosing" programs and met with some 2,300 secondary school students. Members of our many alumni secondary school committees reached an additional twenty-nine programs and talked to some 980 students. Cornell was invited to, but unable to attend because of lack of finances or lack of available personnel, twenty-one other such meetings. Our hope is, of course, to cover this activity more completely each year.

In addition to appearance on the above formal programs, the staff of the Admissions Office traveled extensively to individual schools of importance, reaching 140 institutions in this way and reaching either in individual interview or in group discussion some 1,800 prospective applicants. Here again, our alumni committeemen contributed substantially by conducting interviews or group meetings which reached about 4,000 candidates.

In one way or another as described above, it is safe to estimate that about 10,500 candidates met with some official representative of the Admissions office away from Ithaca. About 2,000 candidates visited the campus. Yet the operation needs to be expanded. Many areas are not yet reached, or are reached once in two or three years. In such areas as Texas and the west coast, for example, no representative from the Admissions Office has ever visited a single school.

The annual conference here on the campus of secondary school headmasters and principals was suspended this year because of budget limitations. This meeting has in the past proved to be an extremely effective method of providing good will and understanding for Cornell of a lasting nature, where it counts most. This conference cannot be allowed to lapse again.

Cornell Day was revived a year ago with great success. Some 193 secondary school juniors attended, representing 27 alumni clubs. It is interesting to note that 111 (58%) of those young men filed formal application for admission this year and that 80% of those who filed had been approved for admission by May 1. The second post-war Cornell Day on April 27-28, 1951, included 258 guests from thirty clubs and ten states.

Cornell Day is a very heartening example of the cooperation of students, faculty, and alumni directed towards the single objective of providing a happy and informative visit to the campus of excellent "Cornell material." The part of our undergraduates in supplying living accommodations, food, entertainment, and guide service, is indispensable. Equally important has been the devotion of the alumni chauffeurs (68 of them this year) who devoted time and money to bring their charges to Ithaca and see them safely home once more. Our gratitude goes to each one of them.

The work of our 300 alumni secondary school committeemen is most valuable. In addition to the activities described above—attendance at college-night programs, informal visits to schools, and talks with candidates—they do a great deal more. Many clubs hold parties previous to the opening of school each fall, so that entering freshmen may meet Cornell undergraduates from their area and each other. A growing number of committeemen work constantly with the Admissions Office, interviewing those who have applied for admission and sending to Ithaca formal reports and judgments of the candidates. This is often the start of a friendly relationship with a representative of Cornell which can prove very helpful to the candidate for many years. Twenty-five per cent of our 7,000 freshman applicants lived in areas where such interviewing was being done. The resulting reports were very helpful to our various faculty selection committees and to the Admissions Office.

Other activities of the office which are a part of the drive to obtain and keep good will might be mentioned. The continuous effort to personalize correspondence is a little more successful each year as greater efficiency of internal operation makes time available. The centralizing of freshman scholarship applications and administration in the Office of Admissions becomes more of a fact each year and contributes greatly to the dissemination of scholarship information and scholarship selection work. Seventeen hundred and ninety-three candidates applied for aid on the common scholarship application form this year, thus making themselves available for such awards as the National Scholarships, the McMullen Regional Scholarships in Engineering, the LeFevre and Undergraduate Scholarships, certain of the alumni club scholarships, and the Burrell Scholarships in Engineering. It is hoped that as time goes on, other scholarships will be added to this group, and other award committees will avail themselves of this great source of excellent candidates.

## APPLICATIONS FOR ADMISSION

A year ago the total number of freshmen applications received was 7,460. This year the figure is 7,046, a drop of 414. In most divisions of the University there has been very little change in demand, with most of the 414 decrease falling in Agriculture which is down 235 and Home Economics, down 105. Agriculture's drop can be attributed largely to the normal shift of farm labor to industry in times of high production, with the consequent requirement that farm families need their young men at home.

There seems to be no real slackening in the demand for college training, nor any lessening in the quality of the average applicant. In fact, it appears probable that the terrific immediate post-war problems which faced most admissions offices, with the necessity of turning down large numbers of well-qualified applicants, may be back with us to some extent one of these days. Before very long veterans will again be added to the flow of candidates coming directly from secondary school, and before very long the effect of the rising birthrate which began in 1937 will swell the number of college candidates. Surely, it is time to think ahead to these increasing pressures, to examine carefully our admissions practices, our selection criteria, and our capacity for giving adequate instruction. Schools and parents should be constantly informed of changing conditions in order to avoid the sudden shocks caused by varying our capacity to accommodate applicants.

A well-planned program of research into the various criteria used in selection, in an effort to isolate those factors which have sound predictive value as to college success, seems highly desirable in a period when we will for some time be choosing between qualified applicants rather than taking all who may have a good chance of success. The public is more and more critical of the college admissions process. Our decisions must be based upon sound facts and reasons in each case, in fairness to that public and to our applicants.

Here are just a few facts about the class which entered in the fall of 1950. Seventy-one per cent were young men, twenty-nine per cent young women. All states but four—Arkansas, Louisiana, Nebraska, and South Dakota—were represented, plus 39 students from the territories and 236 from foreign countries. The median age of the entering men as of September was 18 years, 1 month, 24 days, and of the women, 17 years, 10 months and 15 days.

Twenty-nine per cent of the freshmen in Architecture, Arts, Engineering, and Hotel came from independent schools and the balance from public schools. In the state-supported divisions of Agriculture, Home Economics, and Industrial and Labor Relations, twenty-two per cent were from independent schools.

Applicants came to us from 1,828 different secondary schools including independent schools. Our admitted freshmen represented 614 public and 155 independent schools. Only 22 schools had ten or more representatives in the entering class, with four schools including the Ithaca High School having 20 or more students enrolled. All of the schools with ten or more students in the freshmen class were New York State schools, except for two in New Jersey, one in Massachusetts, and one in New Hampshire.

Applications for admission to the University by transfer from some other institutions of higher learning fell off considerably this year. All of the drop occurred in the applications of men and it is presumed that the uncertainty of the military situation during the late winter and spring of 1950-51 made it expedient for young men to stay where they were currently registered.

The Director of Admissions is well aware of the fact that any success in the enterprise under his direction is due largely to the loyal support of those on his staff, to the fine cooperation of the several selection committees on the campus, and to the invaluable assistance of our alumni secondary school committees. Mr. Robert Storandt, the Associate Director, deserves much praise for his conduct of the scholarship work of the office and for his success in enlisting alumni committeemen and guiding them in their work. Miss Margaret Hassan as office manager has been responsible for the myriad of detailed operations involved in processing applications and for the personnel of the office.

The office has done more work more effectively and with less help than in the past.

## STATISTICS

There follow several tables designed to report statistically the volume and distribution of applications and actual admissions, and comparisons with similar figures for previous years. As noted in the introductory paragraph of this report, the admissions actually took place during the reporting year, while the applications which led to those admissions were made during the previous year. In the body of the report above, reference is made occasionally to the volume of current applications which will not be formally reported until next year.

HERBERT H. WILLIAMS  
Director of Admissions

TABLE I—A. APPLICATION FOR ADMISSION FROM SECONDARY SCHOOLS.

	<i>Fall 1950</i>		<i>Spring 1951</i>		<i>Total</i>	
	<i>Applied</i>	<i>Admitted</i>	<i>Applied</i>	<i>Admitted</i>	<i>Applied</i>	<i>Admitted</i>
Agriculture						
Men.....	1098	460	20	10	1118	470
Women.....	97	41	4	2	101	43
Architecture						
Men.....	158	24	..	..	158	24
Women.....	42	11	..	..	42	11
Arts & Sciences						
Men.....	2392	555	4	1	2396	556
Women.....	1286	216	2	1	1288	217
Engineering						
Men.....	1289	433	1	1	1290	434
Women.....	9	4	..	..	9	4
Home Economics						
Women.....	649	152	..	..	649	152
Hotel Administration						
Men.....	238	66	35	12	273	78
Women.....	18	6	..	..	18	6
Industrial & Labor Relations						
Men.....	149	51	4	2	153	53
Women.....	35	5	..	..	35	5
<b>Total</b>						
Men.....	5324	1589	64	26	5388	1615
Women.....	2136	435	6	3	2142	438
<b>GRAND TOTAL.....</b>	<b>7460</b>	<b>2024</b>	<b>70</b>	<b>29</b>	<b>7530</b>	<b>2053</b>



TABLE I—B. APPLICATIONS FOR ADMISSION FROM OTHER HIGHER INSTITUTIONS.

	Fall 1950		Spring 1951		Total	
	Applied	Admitted	Applied	Admitted	Applied	Admitted
Agriculture						
Men.....	236	67	65	38	301	105
Women.....	18	10	9	3	27	13
Architecture						
Men.....	65	12	7	3	72	15
Women.....	13	4	2	2	15	6
Arts & Sciences						
Men.....	354	100	63	12	417	112
Women.....	279	28	46	10	325	38
Engineering						
Men.....	261	46	22	7	283	53
Women.....	2	..	1	1	3	1
Home Economics						
Women.....	124	35	14	2	138	37
Hotel Administration						
Men.....	121	27	77	27	198	54
Women.....	5	1	4	3	9	4
Industrial & Labor Relations						
Men.....	77	15	21	12	98	27
Women.....	10	1	3	3	13	4
Veterinary Medicine						
Men.....	383	29	2	..	385	29
Women.....	9	..	..	..	9	..
Total						
Men.....	1419	296	257	99	1676	395
Women.....	460	79	79	24	539	103
GRAND TOTAL.....	1879	375	336	123	2215	498

TABLE II. SUMMARY FOR FALL TERM, 1950—SPRING TERM, 1951, FRESHMEN AND TRANSFERS.

	Fall 1950		Spring 1951		Total	
	Applied	Admitted	Applied	Admitted	Applied	Admitted
Men.....	6743	1885	321	125	7000	1984
Women.....	2596	514	85	27	2675	538
TOTAL.....	9339	2399	406	152	9675	2522

TABLE III. APPLICATIONS AND ADMISSIONS IN LAST TEN YEARS.

Year	From Secondary Schools		From Higher Institutions	
	Applied	Admitted	Applied	Admitted
1950-51.....	7530	2053—27%	2215	498—22%
1949-50.....	7330	2015—27%	2486	503—20%
1948-49.....	7701	1757—23%	3261	522—16%
1947-48.....	10108	1680—17%	4636	417—9%
1946-47.....	9424	1419—15%	4720	384—8%
1945-46.....	5282	1512—29%	2296	612—27%
1944-45.....	3329	1304—39%	857	265—31%
1943-44.....	3312	1226—37%	704	222—32%
1942-43.....	3402	1562—46%	607	219—36%
1941-42.....	3812	1672—44%	977	228—23%

TABLE IV. RELATIVE SIZE OF FRESHMAN CLASS.

	Entering Freshmen	Total Undergrads	Per Cent Freshmen
1946-47.....	1419	8279	17%
1947-48.....	1680	7890	21%
1948-49.....	1757	7664	23%
1949-50.....	2015	7668	27%
1950-51.....	2024	7705*	26%
Typical Year— 1940-41.....	1623	5468	30%

\* Includes 99 fifth year engineers in civil, electrical, mechanical, and engineering physics for the first time. Fifth year students in chemical engineering and architecture are included in each year reported.

## APPENDIX XXVIII

## REPORT OF THE DEAN OF MEN AND DEAN OF WOMEN

*To the President of the University:*

SIR: We have the honor to present the report of the Dean of Men and Dean of Women for the year 1950-51.

The Dean of Men and the Dean of Women, by directive of the Board of Trustees, are charged with responsibility for student welfare. They undertake to fulfill this commitment directly through contact with the students, on both the individual and the group level, and indirectly through contribution to related University and community activities.

The concern of the entire staff is with the education of the whole student: his individual participation, contribution, and rewards as a member of the Cornell community. The methods of contact and areas in which these contacts are made are numerous. Referrals come from Faculty, staff, and students themselves. Many students drop by the office voluntarily for assistance with their personal concerns. Letters from parents initiate work with other problems. On the group level, committee work and regularly scheduled appointments with student organization officers establish lines of communication with campus activities. Living units are organized administratively to afford an optimum amount of personal contact between students and representatives of this office. Less formally, through social events of living units and organizations, the staff is in touch with a wide group of Cornellians. It is not possible to estimate the number of telephone calls and office inquiries which are daily routine.

## AREAS OF COUNSELING

For the purpose of analysis, the areas of counseling have been divided into personal-adjustment, educational, vocational, and financial problems. Foreign students with special problems in all these areas are served by the Counselor for Foreign Students.

*Personal-Adjustment Problems.* It is recognized that the above analysis of student problems into a four-unit scheme is an oversimplification of actual conditions. As the student is an integrated personality whose health and mind and morale cannot be dealt with independently of each other, so his problems do not fall neatly into one division or another. The personal problem may have ramifications in the area of vocational concerns; or a basically financial problem may precipitate the kind of adjustment problem that is regarded as personal. Thus a student in consultation with one counselor may be referred to another for further consideration of his situation, and always the staff works closely with the college offices and counselors.

Personal problems include the many difficulties which the student meets in social, civic, and family relationships. Establishing a workable system of values while in college is one of his most constant and baffling tasks.

While a major portion of personal counseling is met by the two deans, other members of the staff carry heavy responsibility according to their background knowledge of a particular problem or according to their training and discipline in a particular area. Students whose concerns have medical implications are referred to the Department of Clinical and Preventive Medicine, and a close relationship is facilitated by the sharing of one person by both staffs, providing a liaison between the two offices.

*Educational Problems.* These are worked through in conjunction with the Faculty advisers and academic counselors in the various schools and colleges. Some students find that their study habits need analysis and reviewing. Other students, after reaching Cornell, develop interests which lead them to consider changing their courses of study. Transfer from one college to another within

the University or from Cornell to another institution can be facilitated through careful investigation of abilities and needs. The educational problem is seen, moreover, to have a close relationship to the vocational problem.

*Vocational Problems.* To assist the student in selecting his vocation, a file and library are maintained in this office where information is catalogued concerning job qualifications, opportunities, and advancement possibilities. The service has been expanded this year by the addition of recent brochures, books, and periodicals. New in this service is the inclusion of information on prizes and scholarships for advanced study, as well as literature on foreign study and travel.

The Office of the Dean of Men and Dean of Women offers students guidance in investigating vocations, and self-appraisal is encouraged on the basis of a student's knowledge of his own interests and aptitudes as well as on the basis of objective findings from test results. Testing is made possible through cooperation with the University Testing and Service Bureau.

Vocational guidance for men is handled by the Cornell Guidance Center, which, since 1948, has operated as a part of this office. The Guidance Center serves, in addition to Cornell students, an outside clientele distributed over the territory adjacent to Ithaca. The University's contract for counseling veterans, effective from 1944, was terminated on March 7, 1951; but Congressional review of the Veterans Administration services to World War II veterans indicates the possible enacting of a "G.I. Bill" for persons who render military service during the present conflict. It seems probable that vocational counseling will be an important part of such a program and that a portion of this Center's facilities will be needed to perform such a service.

Vocational guidance for women is centered in this office, where a staff member helps students with the selection, interpreting, and reporting of tests administered by the University Testing Service. Here again, the work proceeds in close cooperation with the college Faculty and counselors. For every student who took tests through this office, a written report was prepared in triplicate: one copy filed in this office, one sent to the Faculty adviser, and one sent to the person who referred the student. That the students considered the testing valuable was demonstrated by the fact that they frequently initiated follow-up interviews. Many parents of currently enrolled students make referrals in this area, and a few prospective freshmen use the service. The load of work is heavy but adequately met at present.

The Vocational Information Committee of the Women's Self-Government Association met weekly with the vocational counselor. Early in the fall this student committee surveyed the vocational interests of Cornell women and arranged thirteen programs for the year to match the indicated fields of student interest. The student committee cooperated with this office in setting up "job clinics" to advise women students on letters of application and techniques of interviews and further assisted in a series of freshman orientation programs that presented the services of the Office of the Dean of Men and Dean of Women, with emphasis on the vocational service and facilities available to each student.

*Financial Problems.* Students are aided in their financial problems through scholarships, grants-in-aid, loans, and part-time employment. Interviews dealing with financial aid reflect a continued rise in the cost of living and the dwindling of veterans' subsistence allowances. In counseling, considerable emphasis is given to budget planning and a recognition of the energy required to do well a sound academic program. Three members of the staff give their primary attention to financial aid, one coordinating the counseling of women in the areas of scholarships, loans, and employment, and one dealing primarily with the employment needs and the loans for men students. The third member was temporarily added to the staff part-time this year to facilitate the coordination of scholarship assistance. Acting as executive secretary to the Committee on Student Aid and the Faculty Committee on Undergraduate Scholarships, this staff member is able to interview applicants personally, obtain pertinent infor-

mation needed by the committees, and, through research, to locate additional sources of financial aid. A central clearance file is maintained in the office, available to the various colleges and their scholarship committees. Progress has been made in improving and unifying the forms used by the National, McMullen, Burrell, Undergraduate, and LeFevre scholarship applicants. Further coordination of scholarship sources seems desirable and is being encouraged.

During the year, after the initial screening of applications, 147 were considered by the Committee on Student Aid, and awards totaling \$38,808 were granted to 112 students. Including the LeFevre and Undergraduate Scholarship holders, a total of 84 students held scholarships awarded by the Committee on Undergraduate Scholarships. Recommendations of the scholarship secretary to the Teagle Foundation were approved in all cases, resulting in the award of \$51,056 to 72 students. The Teagle Foundation has made \$67,716 available to Cornell for 1951-52.

Although the number of scholarship interviews of women students increased very little over the previous year, there was a marked increase in the number of scholarship recipients and the amount of scholarship money awarded. Recommendations to the Committee on Student Aid resulted in 22 grants to women totaling \$4,100. In the funds administered directly by the Dean of Women, there was an increase in both numbers and amount: 40 grants were made, totaling \$3,035.25. Recommendations to the Committee on Undergraduate Scholarships resulted in three grants amounting to \$1,085. In addition to the above, the office served nine organizations dealing with scholarships for women students, including alumnae clubs, church groups, national foundations, women's clubs, and college scholarship committees.

The Loblaw Corporation of Buffalo contributed one new scholarship of \$500, which will be awarded each year by the Committee on Student Aid to an entering freshman, preference being given to a Loblaw employee or employee's child. Two of the classes, the junior class and the class of 1953, donated book scholarships to be awarded by the office, which assisted 18 students with varying amounts for the purchase of required texts.

Student loan funds administered by the office of the Dean of Men and Dean of Women increased 4.5 per cent over the previous year, making a total of \$98,359.64. Of the 685 loans authorized, 345 were granted to veterans. Thirty-eight loans, totaling \$6,835.36, were for women students, and 647, amounting to \$91,524.28, were for men. The Dean of Women authorized, in addition to the above, 42 emergency loans (\$790) to women students from the Alumnae Loan Fund, on a short-term basis. This was a very large increase over the year previous when only 19 such loans were recorded, indicating that students are operating on very close budgets.

In an attempt to increase the number of available openings for part-time work for men as further aid in meeting the increasing college expenses and living costs in general, a large number of letters were sent to the homes of Faculty and administrative staff in addition to University offices announcing the availability of qualified student assistance. As a result there were 1,130 calls for part-time workers, an increase of 59 per cent over 1949-50. Through these calls 1,113 students were placed, earning a total of \$38,043.07. The total traceable earnings of men during the past year was \$412,471.49, which is about \$75,000 more than for the previous year.

Of the total number of undergraduate women, 257, or 15.72 per cent, earned room, board, or both. Most of these students were referred to such jobs after counseling in relation to their total programs. Their earnings totaled \$119,708. In addition to these, 551 women students were placed in part-time cash jobs by this office.

Summer employment has the dual function of increasing the student's financial resources and giving him background experience toward his vocational objective. Placement is done in this office for both men and women. Although required summer engineering courses, ROTC camps, and Navy cruises

have cut down the number of men registering for summer work, incomplete returns indicate that more students are employed during the summer of 1951 than in preceding summers. An increasing number of industrial and business concerns are hiring on a straight summer-work basis or in connection with summer training programs.

Early in the fall, questionnaires were distributed to women students to obtain information about their previous summer's employment. The office then wrote more than 250 employers in an effort to make contacts for Cornell women. By June 1, 96 of approximately 200 women registered in the office had jobs for the summer, and many more were scheduled for interviews after the close of the school year. The College of Home Economics and a staff member of this office worked closely in registering jobs and notifying applicants.

*Foreign Students.* Three hundred eighty-five foreign students from 67 countries were registered in the University during the past year: 331 men and 54 women; 218 graduates and 167 undergraduates. The Counselor for Foreign Students of this staff also serves the Office of Admissions in a special capacity, clearing all applicants from other countries. Unofficially he performs the same service for the Graduate School.

The great majority of foreign applicants request financial assistance and cannot come to this country without it. Cornell is carrying a heavy load in promoting international education not only through the acceptance of large numbers of foreign students, but also through the award of scholarships, fellowships, and assistantships. During 1950-51 a total of \$145,298 in free tuition and cash stipends was given foreign students; \$45,920 in scholarships and fellowships to 73 foreign students; and \$99,378 in assistantships to 60 students.

In addition to this financial aid from the University, the fraternities, sororities, and cooperatives provided free room and board for 20 foreign students; and the Cornell Charities Campaign raised money to give cash awards to five others. The total dollar value of the financial aid provided by American students is estimated at \$16,000.

The interest and cooperation of the fraternities, sororities, and cooperatives, however, goes beyond this generous financial aid and is reflected in the number of foreign students taken into membership through the regular rushing program. Including the guests mentioned, 75 foreign students from 34 countries were living in or were members of 39 houses. This was 18 per cent of all foreign students, and 33 per cent of the undergraduates, in whom the houses are primarily interested.

The Counselor for Foreign Students works in close cooperation with the colleges, schools, and departments of the University and with student organizations, promoting the academic and social integration of the foreign students on campus.

*Selective Service.* The national emergency gave new emphasis to armed forces programs and to Selective Service. This office continued to carry responsibility for registering Cornell students and University employees under the Selective Service Act of 1948. Three hundred thirty-eight students were processed. In addition, the Dean of Men served as chairman of the newly formed University Military Service Committee. Fifty-five military service bulletins were issued by the Secretary to explain latest developments in Selective Service and the reserve program.

The Office of the Dean of Men and Dean of Women has been a center of information and advising for students on their draft status, developments in Selective Service, and applications for the College Qualification Test. Almost three thousand Cornellians applied for this test. In this connection, it is interesting to note that no more than thirty students withdrew from Cornell to enlist. The expanded ROTC program has had much to do with ensuring Cornell a stable male student enrollment for the coming year.



## PRESIDENT'S REPORT

## GROUP COUNSELING

*Student Activities.* Student activities provide an opportunity for the student to supplement his academic program with the development of his special interests, both vocational and avocational. More important, they encourage a sense of responsibility for community and civic affairs. For Cornell, they are a unifying force on a campus of many disciplines.

The Office of the Dean of Men and Dean of Women has an advising relationship to student organizations. Regularly scheduled meetings are held with the officers of the Independent Council, Interfraternity Council, Student Council, and Women's Self-Government Association, by various members of the staff, to counsel in the planning of their policies and programs. Members of other campus organizations frequently visit the office for advice on the administration of their groups.

One dean is executive secretary to the Faculty Committee on Student Activities; the other dean and the social counselor attend meetings of the committee by invitation, to contribute views and impressions of the student activities. In cooperation with this committee, the office keeps a current file on each student organization, and information is available upon request regarding their activities and current officers. Applications for recognition of new organizations are received in this office and processed through a Student Council Committee and the Faculty Committee on Student Activities.

*Student Organizations.* During 1950-51 members of the Office of the Dean of Men and Dean of Women participated in the following student activities: Campus Chest, Cornell Charities Drive Committee, CURW Freshman Camp Counselors' Conference, CURW Freshman Camp, and CURW Freshman Council Advisory Committee.

Members of the staff served as advisers to the following student organizations:

Cosmopolitan Club	Panhellenic Council
Credo	Pilots' Club
Dance Club	Religious Emphasis Week
Independent Council	Student Council
Interfraternity Council	Student Council Spring Leadership Conference
Kline Road Council	Student Council Survey Committee
Men's Residence Council	Student Council Workshop Committee
Mortar Board	Women's Self-Government Association

*Publications.* Members of the staff served as advisers to the following publications: Co-eds' Creed (published by the Women's Self-Government Association); Desk Book (Student Council); Newsletter for Student Dean Alumnae (graduate students in Personnel Administration); and Scholarship and Financial Aid Bulletin (University publication).

The Office of the Dean of Men and Dean of Women makes available the following: bulletin to head residents, expense and budget leaflets, lists of student organizations with their officers, Orientation Week Program (co-sponsored with Student Council), and the Weekly Social Calendar.

*Social Activities.* The total number of social events scheduled during the year was 1,642, as compared with 1,579 in 1949-50. Informal parties and dances numbered 1,062, or twelve more than in 1949-50.

During 1950-51 a handbook on social manners was prepared by the social counselor for distribution in the fall to entering women.

*Orientation.* Perhaps one of the most significant of University contacts with the student is the orientation program. It is during the student's first week on campus that many of the attitudes and values he will hold as a Cornellian are formed. The aim of an orientation program is to help the student find these values and attitudes and make a wholesome adjustment to his new surroundings. While introducing the traditions of Cornell and providing ready access to information, the program promotes a feeling of belonging to Cornell

and to a class. The function delegated to the Office of the Dean of Men and Dean of Women in orientation is the synchronizing of the programs of the colleges and various campus agencies into a total program for the whole University.

Many of the activities during orientation week must necessarily be held for the class *en masse*. Experience during recent years has shown the value of supplementing this kind of activity with small-group contact. Emphasis was given this phase of the program in the fall of 1950, and plans for giving greater emphasis are being made for the fall of 1951. Student leaders undertake the major responsibility for the small-group program, both in planning and in leading discussion groups and social affairs. This year the student counselors for men and the "VP's" (WSGA corridor officers) have been chosen to represent a large proportion of the participating upperclassmen in an effort to reach the freshman in his living unit. Training for these student positions this year has entailed several on-campus meetings and a week-end session at Hidden Valley.

This year for the first time an orientation program for midyear transfer students was held in February. The University held a mass meeting at which college representatives spoke; the Office of the Dean of Men and Dean of Women sent a letter to each new student; and the Student Council, Women's Self-Government Association, CURW, Willard Straight Hall, and college councils cooperated in the sponsoring of varied campus activities and social affairs.

#### STAFF ACTIVITIES

*In-Service Training.* In-service training for student deans, head residents, and student counselors is part of the program of this office. It includes weekly meetings, occasional field trips, guest speakers, bibliographies, and individual conferences. The sociological problems of a campus and the campus culture are presented by different members of the academic and professional groups. In addition, members of the staff supervise a significant portion of graduate student work in personnel administration, through the conducting of a course in the School of Education, dormitory programs, and serving on special committees.

*Housing.* Housing is recognized to be of paramount importance to maintaining a high level of student performance. Pleasant living and dining arrangements and good study conditions do much to ensure high morale and good health. A sound program in these surroundings encourages harmonious group living and develops social competence. Inherent in dormitory life, moreover, are significant potentialities for meaningful educational experiences.

This office cooperates with the Department of Residential Halls in the development of policy and the upholding of standards to maintain optimum conditions in University living units. For the second year, University housing was available to a majority of freshmen men, and the practice will be continued. The student counseling program has been expanded and improved. Training of the student staff in the fall of 1950 extended over a period of nine weeks, involving participation of members of the Office of the Dean of Men and Dean of Women, Residential Halls, the Department of Clinical and Preventive Medicine, School of Education, Department of Rural Sociology, and speakers from outside the campus. Supervision of the counseling staff was greatly improved this year with the addition of five head student counselors, who held monthly meetings with their groups and reported to this office. Although these students are appointed by this office, their financial support at present comes from funds contributed by an anonymous donor. It is hoped that permanent support for the program may be obtained in the near future.

In the women's area, a series of meetings was held by this staff with the executive committee of the Women's Self-Government Association and small groups of dormitory officers to discuss problems of dormitory administration and their relationships to other students in their units.

A dormitory study of student morale, begun in the fall of 1950, has greatly aided in developing mutual understanding between students and staff. The program, financed by an anonymous donor is the subject of a special report to the President.

During 1951 a new and helpful Committee for Housing-Unit Standards and Expansion was appointed by the President. Its purpose is to give attention to the establishment of basic minimum standards and responsibilities for organizations which would be applicable to all existing housing units and all organizations wishing to establish units on campus.

*University Activities.* Members of the staff of the Office of the Dean of Men and Dean of Women, in assuming University responsibilities, have participated in the following campus committees and their activities: College of Home Economics Faculty; Graduate School Faculty; Department of Clinical and Preventive Medicine Staff; School of Education Faculty; University Faculty; CURW Board of Control; Program and Memorial Building Committees; Willard Straight Board of Governors; several subcommittees; Student-Faculty-Administration Committee; Advisory Systems Committee; Housing Standards Committee; Inter-College Transfer Committee; Military Service Committee; Chairman; National Scholarship Committee; Orientation Advisory Committee; Room Arbitration Committee; Committee on Scheduling Public Events; Scholarships and Grants-in-Aid Committee; Chairman; Faculty Committee on Student Activities; Student Aid Committee; Student Stability Committee; and Undergraduate Scholarships Committee.

*Professional and Community Activities.* Members of the staff, in assuming civic responsibilities and in endeavoring to promote personal and professional growth, have participated in the following groups and community and professional activities:

American Association for the Advancement of Science; American Association of University Professors; American Association of University Women; American Council on Education: program coordinator, national conference on Women in the Defense Decade, Committee on Student Personnel, committee for brochure on student activities; American Psychological Association; American Sociological Association; Commission on the Relation of Independent Schools to Higher Education of the National Council of Independent Schools; Hazen Foundation Associates; Ithaca Committee for Civil Defense Program; Mortar Board; National Association of Deans of Women: Secretary, Committee on Professional Standards, Publications Committee; National Association of Foreign Student Advisers: Executive Committee, Board of Directors, Chairman of Committee on Immigration Problems; National Association of Student Personnel Administrators; National Vocational Guidance Association; New York State Association of Deans and Guidance Personnel: program chairman of 1950 annual meeting, treasurer, publications, brochure, and membership committees; New York State Citizens Council: Board of Directors; New York State Counselors Association; United States Office of Education; consultant for brochure on counseling.

*Campus Talks.* CURW and church groups; orientation meetings and freshman groups; sororities, fraternities, dormitories; student government and leadership groups.

*Off-Campus Talks and Speeches.* Alumni clubs, secondary schools, and state and national professional organizations.

*Writing.* American Council on Education brochure, New York State Association of Deans and Guidance Personnel brochure, Social Etiquette booklet, Student Counselors' manual, and United States Office of Education brochure on counseling.

*Research Completed or in Progress during 1950-51.* Dormitory study on stability: begun in fall, to be continued in 1951-52; thesis on factors associated with morale; thesis on history of housing for women students at Cornell University; thesis on off-campus women at Cornell and Syracuse Universities;

study of orientation programs at various colleges and universities; study of student government; and thesis on summer placement.

*Staff Changes.* Miss Jane Atwood has been appointed to the staff to replace Miss Lila MacLeod as social counselor and to assist Miss Isabel Peard with the in-service training program for student deans and head residents.

New appointments to the dormitory staff are Miss Jane Cuthbert, Miss Wanda Deutsch, and Miss Margaret Neal.

New head residents in the sorority houses are Mrs. Everett Opie and Mrs. F. B. Rogers.

Mrs. Leland J. Winne retired from the dormitory staff in June, 1951.

#### RECOMMENDATIONS

Urgently needed is a full-time person to devote further attention to the development of a scholarship program that would allow research, coordination service to all colleges and offices of the University, and investigation of new sources of scholarship money through funds existing outside the University but not earmarked for Cornell at present.

A counselor for graduate students should as soon as possible be added to the counseling program to help orient these people whose problems are unique.

To conduct an in-service training program for staff; to develop a fuller program of public relations which would permit further contact with parents, alumni, student officers, and Faculty; to continue and expand research on student problems; and to develop further methods of executing a sound and comprehensive program, additional budget is needed.

A question concerning the emotional stability of each applicant for admission appeared this year for the first time on the form sent the high school principals. Special machinery seems necessary to evaluate those applicants who are reported to have significantly low morale and instability in the light of subsequent experience with these students who often present problems of real seriousness.

#### CONCLUSION

The Office of the Dean of Men and Dean of Women serves Cornell as an agency for coordination and cooperation of the various University functions. The work is a kind in which predictions cannot be made, a kind in which effectiveness cannot always be measured. In the endeavor to fulfill its commitment of responsibility for the welfare of Cornell students, the staff has attempted to supplement, without duplicating, the work of other campus agencies, working toward the development and execution of a comprehensive program for the whole individual. It is the feeling of the staff that, although much has yet to be done, the year has, nevertheless, been one of progress toward better service to students, of increased concern and cooperation on the part of the University as a whole for the optimum development of the students, and of personal and professional growth for the staff; a year full of complexities but rich in rewards.

LUCILE ALLEN

Dean of Women

FRANK C. BALDWIN

Dean of Men

## APPENDIX XXIX

REPORT OF THE DIRECTOR OF THE UNIVERSITY  
PLACEMENT SERVICE

*To the President of the University:*

SIR: I have the honor to present the report of the University Placement Service for the year 1950-51.

## GENERAL

"Broader opportunities for women, an insatiable demand for engineers and scientists, and good opportunities for other graduates . . ." In these words Northwestern University described college employment after surveying Cornell and other colleges throughout the country. Women are in greater demand than ever in the sciences, merchandising, insurance, and in government where many new fields were open to them. The demand for engineers was insatiable, but so was the demand for college women with typing and shorthand; and those girls who acquired this skill could find jobs in any location and could use this skill as an entree to work of significance in the most competitive fields.

Campus recruiting was entirely different because normally an employer won't come to the campus unless ten to twenty individuals are available for interviews, but this year they came even when we could not guarantee anyone. One employer flew all the way from California just to interview three engineers and another made a special trip from New York to talk with six women, although in previous years this particular employer seldom hired college trained women. In alumni placement we listed almost three times as many jobs as last year, and this without soliciting employers. It has been a hectic but interesting year.

## ALUMNI PLACEMENT

The demand for experienced personnel has been overwhelming. The decreased size of our staff in Ithaca has made it difficult to do as much with these openings as possible. To complicate matters, Mr. Reyneau in New York City had to run his office without an assistant until late in November so that his activities had to be curtailed, and he could not carry his share of the work load. While he was without an assistant, he had to stop registering women and virtually eliminate outside contact with employers. In November, however, Miss Lois Birrell joined Mr. Reyneau, and that office is again carrying a large part of alumni placement. In spite of difficulties we have been able to handle about the same number of alumni registrants as in previous years, and the number of placements has held up well. The total number of alumni who used the Placement Service increased from 1,400 to 1,500, although the average registrant found a job quickly which tended to ease our work.

Many recent graduates, encouraged by tales of high employment and high paying jobs, have checked with this office to compare their fortunes against these stories. Some of them registered, but many decided against a change after examining facts about employment.

## SENIOR PLACEMENT

The trend, which is accelerating rapidly is for employers to recruit at colleges and universities in their search for talent which can be developed into positions of leadership. This has come about partially because college recruiting has paid



off handsomely for those who have followed this method of filling their personnel needs.

Cornell students are well suited for those organizations looking for executive talent, and in some areas such as chemical engineering the uninitiated would be amazed at competition which exists to interest students in employment. Salaries are being bid up and up, and in recent years college salaries have risen proportionately more than other wages. In addition, pension plans, profit sharing, and other employee benefits are making it more and more difficult to entice people away from their jobs so the inability to find experienced personnel has forced many companies to turn to the colleges to hire inexperienced people who have no liens attached to them.

We had expected that the Korean war and the ensuing draft would discourage employers from visiting the campus or at least from interviewing students who are liable for military service; but very few employers stipulated that they were interested only in men who were exempt from military service. Employers said that, while they find it disrupting for men to spend two or three years in military service, they are interested in college graduates for careers of thirty years. After graduation, students become so scattered that they can never again be contacted in accessible groups where facilities exist for interviewing and presenting information about career opportunities. Because of mobilization some companies will drop college recruiting, but many employers will continue to establish contact through the placement office if only to create rosters of men whom they may wish to hire following military service. This is balanced to some extent by coeducation at Cornell, which enables employers to recruit women concurrently with men. An increasing number of employers report satisfaction with the length of service given by women between college and marriage so employers with immediate needs are hiring women in fields which were once monopolized by men.

During the spring several people worked full time on coordinating the use of interview space and scheduling interviews between students and visiting recruiters. A great deal of our effort is directed to just being a clearing house, for during a busy week we schedule approximately 500 student appointments with as many as 30 employers. While we are grateful for the practical vocational information these companies supply and the valuable job hunting experience they give to all students, too many of them are interested in hiring just the "cream of the crop." This is understandable, but it doesn't help students who need help most, and it keeps our staff too busy to be of service to the men and women these employers are not interested in hiring.

#### SUMMER EMPLOYMENT

Although we do not register students for summer employment, we are interested in this work in cooperation with the part-time employment offices run by the Dean of Men and the Dean of Women. We use our established contacts with business, industry, and other organizations to interest employers in summer work as a useful method of developing mutual interest with students with a view towards full time employment after graduation. As this practice grows, our two offices will continue to work closely together.

#### OFFICE ADMINISTRATION

During the past five years the number of employers who visit our office to interview has doubled. Our alumni placement activity has increased about  $2\frac{1}{2}$  times while our full-time staff has decreased by  $\frac{1}{3}$ . Naturally, the service we can offer to the students and alumni has suffered, and we have had to cut out many things such as collecting references on senior men. Individualized methods of calling opportunities to the attention of registrants and discussing openings with them had to be abandoned in favor of more mass approaches such as Bulletins and Bulletin Boards. Worst of all, it is virtually impossible

for the staff to spend any time discussing individual problems with students. This is particularly true for senior men. In spite of everything, however, the services did not decline in proportion to the decreased facilities and increased work. Operations and procedures have been streamlined so that we are offering better and better facilities in many ways. We have developed an excellent file of career information on over 500 companies which is used constantly by students. During the busy season we are taking care of peak loads without increasing the size of the permanent staff by hiring on a part-time basis outstanding personnel such as graduate students and married women who would not be interested in working all year because of other obligations but who find part-time work here both interesting and profitable.

Miss Potter, my assistant, who is in charge of women's and alumni placement, tells me that through cooperation with the office of the Dean of Women, a vocational program is working so that employers find Cornell women particularly well informed about the variety of opportunities for which they can qualify. Many offices on the campus have helped us by accommodating visiting recruiters, and the Personnel Office has been particularly helpful in sharing their office space and facilities. Miss King in the Physics Department has taken complete charge of several interviews, which was a purely voluntary responsibility. The Placement Committee in Chemistry, headed by Professor Blomquist has done an excellent job of working with graduate students in chemistry so that we have not had to worry about that important area of placement. This cooperation from other colleges and departments has enabled us to get by as well as we did this year. Of the 205 employers known to have visited Cornell, 102 interviewed exclusively in the Placement Service, 22 in the Placement Service and in other departments, and 81 interviewed in other offices. The College of Engineering's facilities accounted for the majority of interviews in other offices.

#### STATISTICS

One placement director of a prominent eastern university keeps no statistics because he feels that placement results can be judged only in terms of benefit to each individual, and a mass of figures tends to obscure the fact that placement is a special problem for every student. Perhaps he is wise and, even if statistics are worthwhile, it is difficult to appraise the results of a year's work on the basis of figures that have to be gathered almost immediately after graduation. Miss Potter, for example, has kept accurate count of the women in the College of Arts & Sciences, and while 45% are reported as "Unemployed or not Reporting," she has found that 22% of the women are unavailable for employment until after September and only 7% report unemployment. November or December would be a better time to report on placement of the senior class as so much job hunting is done in the summer and early fall. Tables I and II, however, have been kept in this form through the years, and, by and large, are useful as a barometer.

Probably of more significance than "Positions Reported," as indicated in Table II would be a column entitled "Placements Made," but this would be difficult because placement at Cornell is complicated by decentralization due to the diffuse vocational objectives and training throughout the University. Then too, we often learn, without knowing where or how they got jobs, that students are employed. We do have a fairly accurate check on Arts and Sciences, Business and Public Administration, Engineering, and Industrial and Labor Relations; and of 289 positions reported under these colleges in Table II, 184 were "placements" made mostly as a result of the interviewing of the 205 employers who sent about 500 representatives to visit the Placement Service and other offices on the campus. Of these 184 positions we estimate that 127 were placed through this office, and we feel that the grand total of 184 positions will go even higher when we obtain a more accurate accounting of positions acquired through student personnel offices of the colleges.

The most distressing fact is that only 33 men of the College of Arts and

Sciences reported positions. Of these, 12 were placements whereas we usually place three times this amount. Most of the men we would expect to place graduated with ROTC commissions. Evidently the men employers want are the same group the armed forces picked for their officer training programs. Most of these ROTC men, however, did interview in the placement offices, and many of them have offers which can be accepted after military service. Thirty-two per cent of the women registrants from Arts and Sciences were placed by this office, however. Most encouraging is the wonderful record made by the two new schools, Industrial and Labor Relations and the School of Business and Public Administration. Industrial and Labor Relations is particularly encouraging as this is a specialized field for which employers are not so apt to recruit on the campus, and students of this school normally find jobs after graduation when the student has more time to visit employers. It is significant that so many have found jobs early enough to be included in this report.

For the employer who is looking for young people in the more generalized "Training Program" and "Junior Executive Development Programs" our school of Business and Public Administration offers what these companies want. This year recruiters for such persons hired 18 out of a class of 39, and last year they hired 35 students out of a class of 50. Incidentally, these figures also demonstrate the effect the war has had on actual placements as both classes were fairly similar in make up.

It is impossible, however, to present any kind of a statistical record of the complete placement activity at Cornell except in fragments as suggested above because it is difficult to coordinate over-all statistics under a centralized system so long as the size of our staff remains only adequate to day by day exigencies.

JOHN L. MUNSCHAUER

Director of the University Placement Service

TABLE I. ALUMNI PLACEMENT STATISTICS.

	1951	1950	1949
<i>Ithaca Office:</i>			
Number of Placements . . . . .	35	23	35
Number of positions listed . . . . .	3198	1504	1243
Number of active registrants on June 30 . . . . .	169	333	334
Number of inactive registrants . . . . .	4468	4060	3705
<i>New York City Office:</i>			
Number of placements . . . . .	55	70	91
Number of positions listed . . . . .	3198	1504	1243
Number of active registrants on June 30 . . . . .	1999	280	294
Number of inactive registrants . . . . .	4561	4163	3698

TABLE II. EMPLOYMENT OF 1950-51 GRADUATES (EMPLOYMENT REPORTED TO THE SERVICE AND THE VARIOUS COLLEGES AND DEPARTMENTS AS OF JUNE 30, 1951).

	Positions Reported	Military Service	Continuing Studies	Total Class	Per Cent Unemployed or Not Reporting		
					1951 %	1950 %	1949 %
Agriculture							
Men . . . . .	144	51	49	313	22	24	22
Women . . . . .	17	0	7	34	29	47	46
Architecture (B. Arch.)							
Men . . . . .	27	6	2	35	0	0	0
Women . . . . .	1	0	0	1	0	0	78
Land Planning (Men)	1	0	1	2	0	..	..
Fine Arts (B.F.A.)							
Men . . . . .	0	0	3	5	40	..	..
Women . . . . .	0	0	0	12	100	..	..
Arts and Sciences							
Men . . . . .	33	95	122	359	30	38	35
Women . . . . .	58 *	0	20	141	45	32	65
Business and Public Administration . . . . .	28	8	0	39	7	14	33
Engineering							
Ch.E. . . . .	38	2	3	45	4	29	34
C.E. . . . .	19	7	1	30	10	29	40
E.E. . . . .	26	3	2	34	9	36	31
Engin. Physics . . . . .	6	0	9	15	0	0	0
M.E. . . . .	39	14	0	53	0	15	32
Met. Eng. . . . .	8	0	1	9	0	0	0
Home Economics . . . . .	67 †	0	8	134	44	34	30
Hotel Administration . . . . .	65	21	5	99	8	19	23
Industrial and Labor Relations							
Men . . . . .	37	16	10	69	9	39	45
Women . . . . .	8	0	1	11	18	..	..

\* Includes 11 married.

† Includes 7 married.

## APPENDIX XXX

## REPORT OF THE DEAN OF THE SCHOOL OF NURSING

*To the President of the University:*

SIR: I have the honor to present the report of the Cornell University-New York Hospital School of Nursing for the year July 1, 1950, through June 30, 1951.\*

## FACULTY

Bessie A. R. Parker, Professor of Nursing and Associate Dean, retired June 30, 1951. Miss Parker, who has been on the Faculty of the School since 1932, served as acting dean during the School's first years as a school in the University (1942-46) and has been associate dean since 1946, her duties being combined with those of associate director of the Nursing Service of the New York Hospital. As an educator and administrator, Miss Parker has brought to students, staff, and Faculty a type of leadership firmly grounded in experience and good judgment and tempered by a deep interest in the individual. During the trying years of World War II, she met the unusually heavy demands of the position of acting dean with a steady vigor and ingenuity which gave courage to her co-workers. The Faculty have recorded their esteem and deep affection for Miss Parker and look upon her continuing participation in the School as professor emeritus as the School's good fortune.

On Miss Parker's retirement, Veronica Lyons, previously Assistant Dean and Associate Professor of Nursing, becomes associate dean of the School. Miss Lyons' varied experience in the School and on the staff of the New York Hospital as a head nurse in the Department of Obstetrics, as nurse in charge of the operating rooms, as head of the Departments of Medicine and Surgery, and more recently as assistant dean gives her an excellent background for her new duties.

Muriel Carbery, Assistant Professor in Surgical Nursing, returned from study leave in February and has served as a special assistant in nursing this spring preparatory to assuming the duties of associate director of Nursing Service of the Hospital July 1, 1951. In this full-time hospital appointment, Miss Carbery holds a school appointment as assistant professor of nursing because of the important relationships of the position with all of the clinical areas of the hospital in which students receive experience.

Kathleen Newton, Assistant Professor of Nursing, transferred in the fall from her position in charge of staff education to that of head of Out-Patient Department Nursing. Edna Tuffley was promoted in the fall from instructor to assistant professor in surgical nursing and at the same time assumed the duties of head of operating room nursing.

Five members of our Faculty were awarded Masters' degrees during the year: Muriel Carbery, Verda Hickcox, Mary Klein, Mrs. Lillian Ginsberg, Elizabeth Harmon. In addition, Dorothy Jump, on study leave during the fall term, received her midwifery certificate.

Verda Hickcox, Associate Professor of Obstetrical Nursing, attended the White House conference in Washington, December 3-7. She has also served for a second year as chairman of the subcommittee on maternity nursing of the New York City League of Nursing Education, a very active group, in which a number of our Faculty in that department have participated. Veronica Lyons has continued to serve as chairman of the national Joint Committee on Unification of Accrediting Activities in Nursing. This committee has recently

\* This report on the School does not cover the Nursing Service of the New York Hospital, which is reported for a calendar year each December.



obtained foundation grants totaling \$200,000 to implement a plan for temporary accreditation in which every nursing school in the country not now professionally accredited (approximately 1,100) will be given opportunity to participate. The ultimate aim is improvement of nursing service through the improvement of nursing education. At the May meeting of the Council of State Leagues of Nursing Education in Boston, Miss Lyons presented a paper, "Experimentation within the Nursing Curriculum—Helping the Student Develop an Understanding of the Psychological Components of Health." At the annual meeting of the Association of Collegiate Schools of Nursing held in Connecticut in May, two members of our Faculty, Miss Lyons and Mrs. Margery Overholser, Associate Professor of Public Health Nursing, served as chairmen of group discussions on "Problems Related to the Conduct of Degree and Non-degree Programs in the Same School" and "The Preparation of Public Health Nurses in Basic Collegiate Programs."

Mrs. Elizabeth Wright, Associate Professor of Psychiatric Nursing, presented a paper at the annual meeting of the Maryland State League of Nursing Education on "Preparation of Supervisors and Instructors for the Mental Health Role in Nursing."

#### ADMISSIONS

This was the fifth year in which *all* students admitted to the School have been required to have completed two years of general liberal arts work in college before admission. Our admission figures for these five years give concrete evidence that the program of the School as a University school is becoming increasingly better understood by applicants, parents, and school counselors. Fall admissions in 1946 were 36; in 1947, 50; in 1948, 51; in 1949, 77; in 1950, 79. Eighty-five is considered as the maximum for admission, and that is the estimated number for 1951.

Probably the most important factors in bringing this about are (1) the discontinuance of the program for high school students which has made it possible to offer the program on a full senior college level, including the clinical instruction which is concurrent with practice; (2) the appointment five years ago of a full-time public relations officer, jointly for the School and hospital nursing service, to carry forward a consistent and steady interpretation of nursing and of the program of the School—doubly necessary in this field so beset by misconceptions; (3) the appointment three years ago of a counselor of students whose contacts with counselors in both colleges and high schools are readily established and in whom parents readily recognize the interest of the School in the individual student; (4) assistance given by the Federation of Cornell Women's Clubs in bringing the School to the attention of school counselors and potential applicants; (5) general assistance of the office of admissions and the advisers in the Colleges of Arts and Sciences, Home Economics, and Agriculture in Ithaca.

The number of admissions is also encouraging when compared with the prewar admissions, at which time more than half of those admitted had completed only high school, and admissions averaged approximately 50 a year. During the peak of the war, with all of the war incentives and the financial assistance given to students by the Cadet Corps, a full quota of students was admitted in only one class (85 in the fall of 1943).

The ratio of applicants to the number which can be accepted is, however, still considerably below that of the other schools of the University. In the coming year we need to study further how we can be prepared to admit more than our present maximum capacity, and how we can cut down the number of students who do not complete the course. That these are questions of national significance is shown in the fact that in spite of the great need throughout the country for graduates of good collegiate preparation only 9 per cent of all students in schools of nursing today are enrolled in degree programs.

The 79 students admitted in 1950 transferred from 49 different colleges in

18 states and Canada. Fifty-five per cent of the students are from homes outside New York State. Enrollment figures are shown in Table I.

TABLE I. ENROLLMENT.

	Completed during the Year	Enrolled as of 6/30/50
<i>Three-year course:</i>		
First-year students . . . . .	..	64
Second-year students . . . . .	..	59
Third-year students: class of 1950 . . . . .	37	..
Third-year students: class of 1951 . . . . .	..	36
	37	159
<i>Courses for affiliates and graduate nurses:</i>		
Affiliating students (4 mo. each) . . . . .	92	27
Field students from other universities . . . . .	24	..
	116	27
GRAND TOTAL, all students . . . . .	153	186

## STATE BOARD EXAMINATIONS

Thirty-six graduates took the New York State Board Examinations and passed with highly creditable standing.

A significant point in relation to state licensing examinations for nurses is that the same examination is now given in all forty-eight states, the District of Columbia, Territory of Hawaii, and the Province of British Columbia, each state determining its own passing grade. New York used this State Board Test Pool Examination for the first time in May, 1950. This is an important step toward better reciprocity arrangements between states.

## CURRICULUM

Subcommittees of the Curriculum Committee have been at work this year on special areas of the curriculum: dental care; evening and night experience; correlation of the first-year program; sequence of instruction in mental health; and the relation of psychiatry and the psychological components of illness to the complete program. The present senior class is the first group of students to follow throughout the three years the integrated plan for presentation of the psychological aspects of growth and development and their relation to health and illness. This has placed emphasis on: First year: development of the healthy personality; better understanding of self with related assistance by a psychiatrist or the counselor when necessary; Second year: emphasis on the child, from birth through adolescence; meaning and importance of family relationships; Third year: psychiatric Nursing, with emphasis on prevention and rehabilitation. As a result of this sequence, four hours of content formerly included in senior psychiatry on growth and development were deleted and replaced with material dealing more directly with psychopathology, which was considered essential but for which there had previously not been time enough.

The Faculties of all clinical departments, as well as those in the preclinical program, are taking steps to ensure that the students see more and more of community facilities for health care through field trips, observation periods, or affiliation. Some of the areas receiving particular thought are: tuberculosis nursing—to give the student understanding of a planned program of rest and progressive activity, and gradual return to normal life; rehabilitation facili-

ties; home care; care of the aged and chronically ill—problems and facilities; low-cost housing projects; cultural areas in the city—Negro, Puerto Rican, and many others.

In the teaching of psychiatric nursing, the study of community agencies has already been strengthened by a new emphasis in some of the former field visits and by additions. This is with the purpose of helping the student to understand the problems and resources for treatment of patients with chronic diseases, old people, individuals with handicaps such as cerebral palsy, mental deficiency, or maladjustment.

In surgical nursing a plan has been worked out for better communication between the in-patient and out-patient departments to bring to the student certain activities of the out-patient department at the time when the experience is likely to mean most to her while she is caring for patients with related conditions in the hospital. In some instances this means an opportunity for follow-up on the same patient. We can thus use to better advantage the teaching opportunities connected with such activities as the glaucoma clinic, vision testing and refraction, diagnosis of cataract, and the explanation given to the patient, fitting the postoperative glaucoma patient with lenses, instruction of the child with strabismus, and his mother, by the orthoptic technician, observation of the speech therapist at work with patients. These illustrations from the eye and ear, nose, and throat specialties can be duplicated in other surgical fields.

#### SCHOLARSHIPS

The committee for scholarships again presented the School with \$3,000 for the scholarship fund. In the four years in which the committee has been working for the fund, their gifts have totaled \$10,400. Twenty students have benefited this year by scholarships or grants-in-aid from this fund. In making grants from this fund, we have kept in reserve the amount to cover the needs of one year in order to be able to announce admission scholarships a year in advance. This fund has been of invaluable help to the School in its efforts to help students who might otherwise have been lost from nursing.

#### STUDIES IN NURSING CARE AND NURSING SERVICE

More nurses are employed in hospitals than in any other type of agency, and the work of the nurse in hospitals has become infinitely more complex in recent years than it was even a few years ago. At the same time hospitals are being reminded with renewed emphasis in various ways that the patient is a human being with individuality which should be respected in the hospital above all places. The combination of these factors—complexity of equipment, exactness required in diagnostic tests, tremendous increase in the numbers and types of treatments and procedures, the constant changes in medical care today, and the time-consuming nature of the personal relationships which make up such an important part of all nursing—explains much of the increased demand for nurses. Over this same period there has been very little change in the administration of the ward or pavilion, which constitutes the hospital unit of operation. We cannot expect to supply nurses to staff hospitals and other services on the basis on which they are set up today. Studies in this area which can determine what adjustment can be made are therefore essential.

For the fall term Miss Elizabeth Harmon, Instructor in Surgical Nursing and Assistant Head of the Department of Surgical Nursing, was released from all teaching and administrative duties in order to give full time to study the use of auxiliary workers in nursing and to plan for better team assignments. One result of her study was in the form of a plan for putting into operation the team assignment in the care of patients in the hospital. Three departments—medicine, surgery, and obstetrics—held one-day institutes of their head nurses to put these plans into operation on selected floors in the hospital.

Late in the spring, the study was used in a special review of the administration of the pavilions for the purpose of simplifying the work of the nurse, delegating duties to auxiliary workers or to service departments wherever possible.

A study of the nursing care of the patient with tuberculosis was completed, and some of the material which was the outcome of the committee's work is now in use in the hospital and by the New York Tuberculosis and Health Association, which participated in the study. A study of the nursing of the diabetic patient is still in process. Under the direction of Dr. Leo Simmons, Visiting Professor of Anthropology in Nursing, several studies begun in February, 1950, have been continued. These relate particularly to the nurse-patient relationship, the role of the head nurse, and the emotional needs of patients. The psychiatric nursing consultation service available to nurses of the general hospital has been studied in one general medical and one general surgical pavilion as a means of seeing more clearly what the nurse is called upon to do in meeting the emotional needs of the patient and how she can be prepared for this.

#### LIBRARY

On recommendation of the library committee and with the agreement of the Faculty, special emphasis will be given to building our library reference material in pediatric and obstetric nursing, considering the two fields together in the acquisition of literature. This decision was made because of the pioneering work being done in our clinical fields in these areas which include unusual opportunities for clinical study, such as in the care of the premature infant.

Most of the work for a central catalog has been completed, which includes all books belonging to the School whether housed in the Lydia E. Anderson Library or in the clinical departments. Department catalogs are now complete but less descriptive. An orientation to the library is given to all new students, affiliates, and new staff.

We have as yet been unable to complete our set of the *American Journal of Nursing*. Publication of this periodical began in 1900, and we still lack the first ten years, 1900-10. As the issues for these years are no longer available through any ordinary channels, we hope that alumnae and friends of the School will remember us and help us in the search for this valuable material. Among those who have made gifts to the School in the past year, we wish particularly to thank Mrs. August Belmont and Dr. Bayne-Jones.

#### HEALTH

As in other years, respiratory infections and gastrointestinal upsets have topped the list of conditions which have necessitated absence. The peak of the influenza infections was reached in February with a tapering off at the end of March. The year has not been unusual from a health standpoint. Students have continued to benefit from a splendid health service which in the case of students preparing for nursing has the double value of teaching them to know what constitutes a good health service as well as giving them the health supervision they themselves need.

Beginning with the class of 1951, the vacation of the senior year, formerly three weeks, was extended to four weeks.

#### SPECIAL PROGRAMS FOR GRADUATE NURSES

*Institutes in the Care of Premature Infants:* Institutes for graduate nurses and physicians in the care of premature infants, begun in the Department of Pediatrics in the fall of 1949, have continued this year with very satisfactory results. In each of four institutes, six nurses and five doctors have attended, with very few exceptions coming in pairs from the same hospital or public

health service. Nearly half of the nurses and doctors have been from outside New York State. The nurse in charge of this program has had opportunity to visit several parts of the country from which these workers come, and she will this summer visit in New Orleans and in North Carolina where similar programs are offered.

*Field Students in Clinical Specialties:* Graduate nurses registered in advanced clinical courses at Teachers College, Columbia University, have continued to come to us for field practice periods of varying lengths. In addition, in the summer of 1950, we offered field experience of six weeks in psychiatric nursing to four graduate nurses from the University of Connecticut. In all, twenty-four students were with us for periods ranging from two days a week for four months to one full-time week, in pediatrics, including the newborn nurseries and out-patient department, in maternity nursing, in the nursing of poliomyelitis as part of a major program in orthopedic nursing, in mental hygiene, in the integration of public health nursing in the basic curriculum, and in psychiatry. We regard our participation in this program as exceedingly important because of the great need throughout the country for better-prepared clinical specialists in our hospitals, public health services, and schools of nursing.

#### COURSES FOR AFFILIATING STUDENTS

Students from three hospital schools and one collegiate school received sixteen weeks' instruction and experience in pediatrics and/or obstetrics, as shown in Table II.

TABLE II.

<i>Schools of Nursing from Which Students Come to Us for Affiliation</i>	<i>Clinical Course Offered</i>	<i>Number of Students Completing, 1950-51</i>
Burbank Hospital School		
Fitchburg, Mass. ....	Pediatrics 16 weeks	13
Presbyterian Hospital School		
Newark, N. J. ....	Pediatrics 16 weeks	23
Mountainside Hospital School		
Montclair, N. J. ....	Pediatrics 16 weeks	33
Skidmore College		
Department of Nursing, New York, N. Y. ....	Obstetrics 16 weeks	23
TOTAL .....		92

#### COUNSELING SERVICES

A full-time counselor of students has now been on the School Faculty for three years, and the position has proved its value in every phase of the School program. This office has worked toward the ideal of helping each individual student gain a wider self-knowledge and recognition and use of her potentialities for nursing and for adjusting to society as a useful, happy, and contributing member. The methods used—working both directly with students and with individuals and groups of the Faculty and hospital staff—have been informal conferences, committee meetings, discussion groups, and planned conferences on the professional progress of each student. The counselor has taken an important part in various phases of the staff education program for head nurses and others with whom the student works in her hospital assignments. She has served on the promotion committees and on the admissions committee and has assisted in interviewing potential applicants.



## FACILITIES FOR INSTRUCTION

The excellent clinical facilities of the New York Hospital and the facilities of the Visiting Nurse Service of New York available to our students and Faculty offer unusual opportunity. In many departments of the hospital we are badly in need of more space for student conferences near the pavilions, as well as for conferences with personnel. The admission of larger classes in the last two years has led us to believe that we must plan for more sectioning of groups for nursing classes, which therefore means providing more instructor-hours. Our well-equipped residence gives suitable opportunity for all types of social gatherings, but we are steadily reminded of our great limitation in outdoor space for activity programs. We are almost entirely dependent on the resources of the community, for which the individual student must pay, such as tennis, bicycling, and bowling.

## DEVELOPMENTS IN THE HOSPITAL NURSING SERVICE HAVING IMPORTANT BEARING ON THE SCHOOL PROGRAM

A year ago I was able to write in this report that for the first time since the war the Nursing Department of the Hospital had felt the long-hoped-for release from some of the war tensions and was able to look forward to planning and providing the type of patient care which gives proper support to the medical programs of the Center. This improvement in staffing has unfortunately not continued. At the end of this school year, we are shorter than at any previous period at least in recent years. Our steps taken to make provision for offsetting this in the future are recorded above. Shortage of personnel in other departments besides nursing makes progress in some of the needed changes slower than it might be otherwise. Very much needed are further steps in centralization in the storage and upkeep of the vast variety of technical equipment used in hospital care today—electric suction pumps, inhalators, proctoscopes, pressure mattresses, oscillating beds, and heat cradles being only a few examples—and for cleaning and sterilization of equipment. In the case of many of these duties, reallocation cannot be expected to reduce total expenditures or markedly release time, because this reallocation is necessary as a result of expansion of services or increased technicality of services *already* much too heavy for old methods. The reallocation will bring increased efficiency, however, and provide the basis for further expansion.

Increase in salary scales for all nurses on the hospital staff, the granting of nine full holidays in the year instead of half-holidays as had always been the case in the Nursing Department, an improved method for paying for overtime, and provision of Social Security coverage have all given evidence of real improvement in employment practices in hospital nursing. Twenty-one members of our staff have had a day's observation with the Visiting Nurse Service this year, and the same number of nurses of that staff have come to us, two at a time, for a day's observation and conferences in the department of their choice. This continues a plan for exchange visits which is a very valuable part of maintaining a staff equipped to plan for good care of patients.

We are indebted to members of the medical, administrative, and service staffs of the hospital for their continued and invaluable support. We express our appreciation also to the many community agencies which have been most generous, in spite of pressures of service, in helping with our students. We believe that a return in the form of a steady flow of new graduates who have had a good preparation to begin their nursing in either public health or hospital positions will be heartening to these agencies, because the answer to what is known as the present shortage of nurses rests even more in quality of preparation than in numbers.

VIRGINIA M. DUNBAR

Dean of the School of Nursing (and Director of the  
Nursing Service of The New York Hospital)

## APPENDIX XXXI

## REPORT OF THE DIRECTOR OF VETERANS EDUCATION

*To the President of the University:*

SIR: I have the honor to present the report of the Office of Veterans Education for the year 1950-51.

The number of veterans in training at the University has continued to decrease in all divisions; the undergraduate veteran enrollment dropped 50 per cent over that of the preceding year, the graduate enrollment 25 per cent. Married veterans, however, were only 14 per cent fewer than a year ago.

On March 9, 1951, the contract between Cornell and the Veterans Administration for the testing and guidance of veterans was terminated, and the service was absorbed by the V. A. regional office at Syracuse. In the seven years of its operation under V. A. contract the Cornell Guidance Center administered tests to over 9,000 veterans and in so doing established a foundation of techniques and experience which it is hoped may now serve Cornell students in increasing numbers. The Veterans Administration, through its contract operation of over three hundred such centers has performed a valuable service to higher education by thus promoting guidance services for students on many campuses where previously little or no guidance work of a formal nature had been done.

On June 30 the Office of Veterans Education as a separate function was terminated, and its work was assumed by the office of the Treasurer. In this final report I should like to express my appreciation to the Faculty and administrative staff for their patient cooperation in sharing the sometimes troublesome details incident to the operation of the "G.I. program." In general, I believe most of us will agree this experience with the veterans has been an exhilarating experiment in federal subsidies for higher education in which Cornell has been happy to play its part. It may be too early to assess fully the results, but there seems little doubt that in the "G.I. Bill" the American people have rewarded their World War II veterans constructively and have pointed the way to expanded opportunity for American youth in higher education.

# VETERANS EDUCATION

237

## ENROLLMENT OF VETERANS, 1950-51.

*Summer Courses: 707. Fall Term: 1944. Spring Term: 1696.*

Total enrollments . . . . .	4354
Less duplicates . . . . .	1958
Total veterans enrolled . . . . .	2396

## ENROLLMENT BY SCHOOLS AND COLLEGES

	<i>Summer</i>	<i>Fall</i>	<i>Spring</i>
Aeronautical engineering . . . . .		6	6
Agriculture . . . . .		261	217
Short courses . . . . .	1	10	4
Architecture . . . . .		55	38
Arts and sciences . . . . .		181	150
Business and public administration . . . . .		28	19
Engineering . . . . .		249	221
Chemical . . . . .		(35)	(27)
Civil . . . . .	1	(35)	(34)
Electrical . . . . .		(91)	(84)
Mechanical . . . . .		(77)	(65)
Engineering physics . . . . .		(11)	(11)
Extension education . . . . .	11		
Extramural courses . . . . .	4	40	37
Field school in geology . . . . .	2		
Graduate school . . . . .		553	491
Home economics . . . . .		5	4
Hotel administration . . . . .		123	107
Hotel unit courses . . . . .	40		
Industrial and labor relations . . . . .		99	96
Law . . . . .		195	184
Nutrition . . . . .		13	10
Summer session . . . . .	648		
Veterinary . . . . .		126	112
			<i>For Year</i>
Married veterans . . . . .			1021
Children . . . . .			422
Canadian veterans . . . . .			15
Disabled veterans (Public Law 16) . . . . .			141

DONALD H. MOYER  
Director of Veterans Education

## APPENDIX XXXII

REPORT OF THE DIRECTOR OF THE DIVISION OF  
EXTRAMURAL COURSES

*To the President of the University:*

SIR: I have the honor to present the report of the Division of Extramural Courses for the year July 1, 1950 to June 30, 1951.

Extramural courses have been offered during the summer, 1950, and in each of the winter terms. Four courses were offered during the summer in cooperation with the Departments of Sociology and Anthropology, Agricultural Economics, Animal Husbandry, and Rural Education. There were 138 registrations in the four courses for a total of 312 credit hours.

Four off-campus courses were offered in the fall term in three centers—Ithaca, Elmira, and Buffalo. These courses were arranged with the approval and cooperation of the Departments of Painting and Sculpture, Education, Rural Education, and Electrical Engineering. A total of 57 registrations was recorded in the four courses. The total number of credit hours was 127.

Three extramural courses were offered during the spring term in two off-campus locations—Ithaca and Elmira. The registrations totaled 52 for 75 hours of credit. The Departments of Painting and Sculpture, History of the Arts, and Rural Education cooperated in offering these courses.

For the year the total registration in extramural courses amounted to 247 students for 514 hours of credit.

In addition to the administration of off-campus or extramural courses, the Division has enrolled during the fall and spring terms 239 students for on-campus courses. These were nonresident, employed persons who were unable to spend full time as students. The varied nature of their interests and needs is evidenced in the fact that the enrollments were for courses in 14 schools and colleges of the University and in 53 different departments. The total credit hours for which these students were registered was 906. The average number of hours per student was approximately  $3 \frac{1}{5}$ .

The cooperation of the Faculty and administration in making the services of the Division available appears to be justified and appreciated. As additional courses can be made available in off-campus centers and at convenient hours for those persons not resident on the campus, the services of the University in the form of adult education can be increased. Emphasis is being placed upon increasing the available course offerings of the Division.

W. A. SMITH

Director of the Division of Extramural Courses